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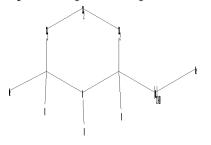
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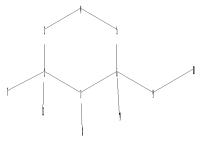
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0.21

0.21

chain nodes :
7 8 9 10 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
1-8 2-7 2-13 6-9 6-14 9-10
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact bonds :

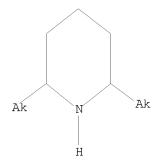
1-8 2-7 2-13 6-9 6-14 9-10

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

3 ANSWERS

=> s L1 sss sam
SAMPLE SEARCH INITIATED 13:38:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 464993 TO ITERATE

0.4% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: 9260939 TO 9338781 PROJECTED ANSWERS: 12365 TO 15533

L2 3 SEA SSS SAM L1

=> s L1 sss full FULL SEARCH INITIATED 13:38:29 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9296204 TO ITERATE 5.9% PROCESSED 545089 ITERATIONS 920 ANSWERS

10.4% PROCESSED 968795 ITERATIONS 1228 ANSWERS

1268 ANSWERS

10.8% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.36

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE** BATCH **INCOMPLETE** PROJECTED ITERATIONS: 9296204 TO 9296204 PROJECTED ANSWERS: 11462 TO

1268 SEA SSS FUL L1 L3

=> d scan

L3 1268 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

4-Piperidinamine, 2,2,6,6-tetramethyl-N-[3-methyl-1-(2-methylpropyl)] butyl]-ΤN

MFC18 H38 N2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):d scan 'D SCAN' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END". HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 1268 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

ΙN 2-Propenoic acid, 2-methyl-, 2,2,6,6-tetramethyl-4-piperidinyl ester, polymer with Adeka Reasoap SR 10 and butyl 2-propenoate

MF (C13 H23 N O2 . C7 H12 O2 . Unspecified)x

СТ PMS

> CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH} \end{array}$$

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 1268 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 4-Piperidinamine, N-(3-cyclohexen-1-ylmethyl)-2,2,6,6-tetramethyl-

MF C16 H30 N2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 1268 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzenesulfonamide, 4-[[(2,2,6,6-tetramethy)]-4-

piperidinyl)amino]carbonyl]amino]-

MF C16 H26 N4 O3 S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

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L4 STRUCTURE UPLOADED

=> s L4 sss full

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SEARCH TIME: 00.00.34

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 9296204 TO 9296204
PROJECTED ANSWERS: 391 TO 519

L5 49 SEA SSS FUL L4

=> file caplus

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SINCE FILE TOTAL
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358.77

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=> s 13/Uses

77 L3

7150149 USES/RL

L6 39 L3/USES

(L3 (L) USES/RL)

=> s L5/Uses

10 L5

7150149 USES/RL

L7 2 L5/USES

(L5 (L) USES/RL)

=> s L6 OR L7

L8 39 L6 OR L7

=> d L8 10-30 IBIB ABS HITSTR

L8 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:669445 CAPLUS

DOCUMENT NUMBER: 149:33556

TITLE: Propylene polymer fibers containing hindered

piperidine-based weatherability improvers

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

Kiura, Masaaki; Mukuta, Takahiro
Mitsubishi Rayon Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 12pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008127728 PRIORITY APPLN. INFO.:	A	20080605	JP 2006-317036 JP 2006-317036	20061124 20061124
GI				

AB The invention relates to the fibers manufactured from a compns. comprising (A) propylene polymers and (B) the improvers prepared from (b1) 10-50 parts piperidyl-containing ethylenically unsatd. monomers I (R1 = H, C1-2 alkyl; X = O, imino; Y = H, C1-20 alkyl, alkoxy; Z = H, cyano), (b2) 50-90 parts ≥1 monomers selected from C4-13 alkyl (meth)acrylates and aromatic vinyl monomers, and (b3) 0-20 parts monomers other than b1 and b2 (b1 + b2 + b3 = 100 parts). Thus, a composition comprising isotactic polypropylene (Y 2000GV) and a reactive anionic emulsifier (Adeka Reasoap SR 10)-Bu methacrylate-4-methacryloyloxy-1,2,2,6,6-pentamethylpiperidine-4-methacryloyloxy-2,2,6,6-tetramethylpiperidine-styrene copolymer (improver) was made into a fiber showing good elongation and strength retention after a weathering test.

IT 1028903-21-0P 1028903-24-3P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(weatherability improver; propylene polymer fibers containing hindered piperidine-based weatherability improvers)

RN 1028903-21-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with Adeka Reasoap SR 10, ethenylbenzene, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 68548-08-3 CMF C14 H25 N O2

CM 3

CRN 31582-45-3 CMF C13 H23 N O2

CM 4

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 5

CRN 97-88-1 CMF C8 H14 O2

RN 1028903-24-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2,2,6,6-pentamethyl-4-piperidinyl ester, polymer with Adeka Reasoap SR 10, 4-(1,1-dimethylethyl)cyclohexyl 2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 84100-23-2 CMF C13 H22 O2

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ \text{H}_2\text{C} & & \text{CH}-\text{C}-\text{O} \end{array}$$

CM 3

CRN 68548-08-3 CMF C14 H25 N O2

CM 4

CRN 31582-45-3 CMF C13 H23 N O2

L8 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:669209 CAPLUS

DOCUMENT NUMBER: 149:11743

TITLE: Polysiloxane graft copolymers having hindered

piperidine groups, weatherability improvers containing the copolymers, and aqueous coatings containing the

improvers

INVENTOR(S): Mukuta, Takahiro; Kiura, Masaaki PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 16pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008127526	A	20080605	JP 2006-317065	20061124
PRIORITY APPLN. INFO.:			JP 2006-317065	20061124
GI				

AB The invention relates to the copolymers manufactured from (A) 1-94% polyorganosiloxanes having functional groups capable of forming graft polymers, (B) 6-50 % piperidyl-containing ethylenically unsatd. monomers I (R1 = H, C1-2 alkyl; X = O, imino; Y = H, C1-20 alkyl, alkoxy; Z = H, cyano), and (C) 0-93 % ethylenically unsatd. monomers (A + B + C = 100 %). Thus, γ-methacryloxypropyltrimethoxysilane-octamethylcyclotetrasiloxane copolymer, a reactive anionic emulsifier (Adeka Reasoap SR 10), Bu acrylate, Bu methacrylate, 4-methacryloyloxy-1,2,2,6,6-pentamethylpiperidine, and styrene were emulsion-polymerized to give an improver with good storage stability, which was then used for an aqueous acrylic coating comprising acrylic acid-Adeka Reasoap SR 10-Bu acrylate-Me methacrylate-styrene copolymer ammonium salt.

IT 1029394-26-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(weatherability improver, core-shell; polysiloxane graft copolymers having hindered piperidine groups for weatherability improvers of aqueous coatings)

RN 1029394-26-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with Adeka Reasoap SR 10, 2,2,4,4,6,6,8,8-octamethylcyclotetrasiloxane, 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, graft (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

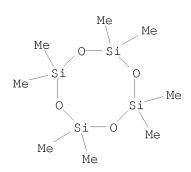
CRN 31582-45-3 CMF C13 H23 N O2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$\begin{array}{c|c} \text{H2C} & \text{O} & \text{OMe} \\ \parallel & \parallel & \parallel \\ \text{Me-C-C-O-(CH2)}_3 - \text{Si-OMe} \\ \parallel & \parallel \\ \text{OMe} \end{array}$$

CM 4

CRN 556-67-2 CMF C8 H24 O4 Si4



CM 5

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

L8 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:669208 CAPLUS

DOCUMENT NUMBER:

TITLE:

149:11742

Modifiers containing hindered amine light stabilizers, and aqueous coatings with good weather resistance and low minimum film forming temperature containing them

Mukuta, Takahiro; Kiura, Masaaki INVENTOR(S): PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008127525	A	20080605	JP 2006-317064	20061124
PRIORITY APPLN. INFO.:			JP 2006-317064	20061124
GT				

$$R1$$
 $H_2C = C$
 CH_3
 CH_3
 CH_3
 CH_3
 CH_3

AΒ The invention relates to the modifiers containing emulsions with min. film forming temperature (MFT) \leq 5° manufactured by emulsion-polymerizing (A) 6-50 parts hindered piperidyl-containing ethylenically unsatd. monomers I (R1 = H, C1-2 alkyl; X = O, imino; Y = H, C1-20 alkyl, alkoxy; Z = H, cyano) and (B) 50-94 parts ethylenically unsatd. monomers other than A (A + B = 100 parts). Aqueous coatings with reduced film-forming aid (organic solvent) contents are provided with this invention. Thus, a reactive nonionic emulsifier (Adeka Reasoap ER 30), a reactive anionic emulsifier (Adeka Reasoap SR 10), Bu acrylate, 4-methacryloyloxy-1,2,2,6,6pentamethylpiperidine, and styrene were emulsion-polymerized to give a modifier with MFT 3°, solid content 50%, and good storage stability. An aqueous acrylic coating comprising acrylic acid-Adeka Reasoap SR 10-Bu acrylate-Me methacrylate-styrene copolymer ammonium salt and the modifier showed good water resistance.

ΤТ 1029396-11-9P

> RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(modifier, comprised of actual and assumed monomers; modifiers containing hindered amine light stabilizers for aqueous coatings with good weather resistant and low min. film forming temperature)

1029396-11-9 CAPLUS RN

2-Propenoic acid, 2-methyl-, 2,2,6,6-tetramethyl-4-piperidinyl ester, CN polymer with Adeka Reasoap SR 10, butyl 2-propenoate and oxirane, graft (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

CM 4

CRN 75-21-8 CMF C2 H4 O



1029396-07-3P 1029396-09-5P ΙT

> RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(modifier; modifiers containing hindered amine light stabilizers for aqueous coatings with good weather resistant and low min. film forming temperature)

RN 1029396-07-3 CAPLUS

2-Propenoic acid, 2-methyl-, 2,2,6,6-tetramethyl-4-piperidinyl ester, CN polymer with Adeka Reasoap SR 10 and butyl 2-propenoate (CA INDEX NAME)

CM 1

676999-51-2 CRN Unspecified CMF

PMS, MAN CCI

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 31582-45-3 CMF C13 H23 N O2

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH-----} \text{CH}_2 \end{array}$$

RN 1029396-09-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,2,6,6-tetramethyl-4-piperidinyl ester, polymer with Adeka Reasoap SR 10, butyl 2-propenoate and α -[1-[(nonyloxy)methyl]-2-(2-propen-1-yloxy)ethyl]- ω -hydroxypoly(oxy-1,2-ethanediyl), graft (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 612822-56-7

CMF (C2 H4 O)n C15 H30 O3

CCI PMS

CM 3

CRN 31582-45-3 CMF C13 H23 N O2

CRN 141-32-2 CMF C7 H12 O2

L8 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:668983 CAPLUS

DOCUMENT NUMBER: 149:10890

TITLE: Hindered piperidine-modified thermoplastic resins,

stabilizers containing them, and recyclable

weather-resistant polyvinyl chloride compositions

containing them

INVENTOR(S): Kiura, Masaaki; Mukuta, Takahiro PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 13pp.

Ι

Me Me

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008127523	A	20080605	JP 2006-317035	20061124
PRIORITY APPLN. INFO.:			JP 2006-317035	20061124
GI				

The invention relates to the stabilizers manufactured by copolymg. monomer mixts. comprising (A) 5-40 parts hindered piperidine-containing ethylenically unsatd. monomers I (R1 = H, C1-2 alkyl; X = O, imino; Y = H, C1-20 alkyl, alkoxy; Z = H, cyano), (B) 60-95 parts glycidyl-containing ethylenically unsatd. monomers, and (C) 0-30 parts ethylenically unsatd. monomers other than A and B (A + B + C = 100 parts). The invention also relates to the compns. comprising 0.1-10% (based on total compns.) of the stabilizers and polyvinyl chloride. Thus, a composition comprising polyvinyl chloride (TK 1300) and reactive anionic emulsifier (Adeka Reasoap SR 10)-glycidyl methacrylate-4-methacryloyloxy-2,2,6,6-tetramethylpiperidine copolymer (stabilizer) was kneaded and pressed to give a test sheet with good thermal discoloration prevention after recycling.

IT 1028903-17-4P 1028903-19-6P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(stabilizer; hindered piperidine-modified thermoplastic resins for stabilizers of recyclable weather-resistant polyvinyl chloride compns.)

RN 1028903-17-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with Adeka Reasoap SR 10 and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

RN 1028903-19-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with Adeka Reasoap SR 10, 2-oxiranylmethyl 2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 676999-51-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{tabular}{c|cccc} O & O & CH_2 \\ \hline & & & & & & \\ CH_2-O-C-C-Me \\ \hline \end{tabular}$$

CM 4

CRN 106-90-1 CMF C6 H8 O3

L8 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:638880 CAPLUS

DOCUMENT NUMBER: 149:10884

TITLE: Stabilizers for polyolefin resins with good thermal

stability

INVENTOR(S): Kiura, Masaaki; Mukuda, Takahiro PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: PCT Int. Appl., 27pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION N	
WO 2008062860	A1	20080529	WO 2007-JP726	
W: AE, AG, AL,	AM, AT,	AU, AZ,	BA, BB, BG, BH,	BR, BW, BY, BZ, CA,
CH, CN, CO,	CR, CU,	CZ, DE,	DK, DM, DO, DZ,	EC, EE, EG, ES, FI,
GB, GD, GE,	GH, GM,	GT, HN,	HR, HU, ID, IL,	IN, IS, JP, KE, KG,
KM, KN, KP,	KR, KZ,	LA, LC,	LK, LR, LS, LT,	LU, LY, MA, MD, ME,
MG, MK, MN,	MW, MX,	MY, MZ,	NA, NG, NI, NO,	NZ, OM, PG, PH, PL,
PT, RO, RS,	RU, SC,	SD, SE,	SG, SK, SL, SM,	SV, SY, TJ, TM, TN,
TR, TT, TZ,	UA, UG,	US, UZ,	VC, VN, ZA, ZM,	ZW
RW: AT, BE, BG,	CH, CY,	CZ, DE,	DK, EE, ES, FI,	FR, GB, GR, HU, IE,
IS, IT, LT,	LU, LV,	MC, MT,	NL, PL, PT, RO,	SE, SI, SK, TR, BF,
BJ, CF, CG,	CI, CM,	GA, GN,	GQ, GW, ML, MR,	NE, SN, TD, TG, BW,
GH, GM, KE,	LS, MW,	MZ, NA,	SD, SL, SZ, TZ,	UG, ZM, ZW, AM, AZ,

GT

$$\begin{array}{c} & \text{Me} \\ \text{R1} & \text{Me} \\ \text{H2C=C-CO-X} & \text{Me} \\ \text{X-Y} & \text{Me} \\ & \text{Me} & \text{I} \end{array}$$

AΒ The title stabilizers containing a copolymer are obtained by polymerizing an unsatd. monomer mixture composed of an ethylenically unsatd. monomer having a piperidyl group (I) 1-50, \geq 1 monomer selected from iso-Bu methacrylates, C6-13 alkyl (meth)acrylates, and aromatic vinyl monomers 50-99, and an ethylenically unsatd. monomer except A and B 0-20%, wherein R1 = H or C1-2 alkyl; X = 0 or imino; Y = H or C1-20 alkyl or alkoxyl; andZ = H or cyano group. Thus, 5 parts 4-methacryloyloxy-2,2,6,6tetramethylpiperidine and 95 parts iso-Bu methacrylate were polymerized to give a copolymer, 5 parts of which was mixed with 95% polypropylene, kneaded, and molded to give a test piece, showing good heat and light resistance.

ΙT 1028740-26-2P

> RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(stabilizer; stabilizers for polyolefin resins with good thermal stability)

1028740-26-2 CAPLUS RN

CN 2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 31582-45-3 CMF C13 H23 N O2

CM2

CRN 97-86-9 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{i-BuO-} & \text{C-C-Me} \end{array}$$

ΙT 1028750-07-3P RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(stabilizers for polyolefin resins with good thermal stability)

RN 1028750-07-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2,2,6,6-pentamethyl-4-piperidinyl ester, polymer with (1,1-dimethylethyl)cyclohexyl 2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 117635-64-0 CMF C13 H22 O2

CCI IDS

CM 2

CRN 68548-08-3 CMF C14 H25 N O2

CM 3

CRN 31582-45-3 CMF C13 H23 N O2

L8 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:632629 CAPLUS

DOCUMENT NUMBER: 149:167124

TITLE: Antinociceptive profile of 2,3,6-trisubstituted

piperidine alkaloids: 3-O-acetyl-spectaline and semi-synthetic derivatives of (-)-spectaline

AUTHOR(S): Viegas, Claudio, Jr.; Alexandre-Moreira, Magna Suzana;

Fraga, Carlos Alberto Manssour; Barreiro, Eliezer Jesus; Bolzani, Vanderlan da Silva; Palhares de

Miranda, Ana Luisa

CORPORATE SOURCE: Laboratorio de Fitoquimica e Quimica Medicinal,

Departamento de Ciencias Exatas, Universidade Federal

de Alfenas, Alfenas, 37130-000, Brazil

SOURCE: Chemical & Pharmaceutical Bulletin (2008), 56(4),

407-412

CODEN: CPBTAL; ISSN: 0009-2363 Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB In early studies, we have reported the antinociceptive profile of (-)-spectaline, a piperidine alkaloid from Cassia spectabilis. present study describes the synthesis, the antinociceptive and anti-inflammatory activities of a series of 2,3,6-trialkyl-piperidine alkaloids: the natural (-)-3-0-acetyl-spectaline (LASSBio-755) and ten semi-synthetic spectaline derivs. Structure-activity relationship (SARs) studies were performed. The structures of all synthesized derivs. were confirmed by means of NMR. Compds. were evaluated for their analgesic (acetic acid-induced mouse abdominal constrictions, hot-plate test, formalin-in-duced pain test) and some of them for the anti-inflammatory activities (carrageenan-induced rat paw edema test). The pharmacol. results showed that several of the new compds, given orally at a dose of 100 μ mol/kg significantly inhibited the acetic acid-induced abdominal constrictions, but they were less active than (-)-spectaline. LASSBio-755 and LASSBio-776 were the most actives with 37% and 31.7% of inhibition. In the formalin-induced pain only LASSBio-776 was able to inhibit by 34.4% the paw licking response of the inflammatory phase, (-)-spectaline and LASSBio-755 did show any activity. In the carrageenan-induced rat paw edema, only (-)-spectaline exhibited an anti-inflammatory profile, showing an ED50 value of 56.6 μ mol/kg. Our results suggest different mechanisms of action for the analgesic activity observed for LASSBio-776 (3-O-Bocspectaline), LASSBio-755 (3-O-acetyl-spectaline) and (-)-spectaline (LASSBio-754). The antinociceptive profile of some of the semi-synthetic spectaline derivs. extends our research concerning the chemical and pharmacol. optimization of isolated natural products in the search of new drug candidates from brazilian biodiversity.

IT 1039629-71-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(2,3,6-trisubstituted piperidine alkaloids preparation, SAR, analgesic and anti-inflammatory activities)

RN 1039629-71-4 CAPLUS

CN 3-Piperidinone, 2-methyl-6-(13-oxotetradecyl)-, (2R,6S)- (CA INDEX NAME)

Absolute stereochemistry.

IT 1039629-68-9P 1039629-70-3P 1040150-51-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(2,3,6-trisubstituted piperidine alkaloids preparation, SAR, analgesic and anti-inflammatory activities)

RN 1039629-68-9 CAPLUS

CN 2-Tetradecanone, 14-[(2S,5R,6R)-5-hydroxy-6-methyl-2-piperidinyl]-, oxime (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 1039629-70-3 CAPLUS

CN 2-Tetradecanone, 14-[(2S,5R,6R)-5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-6-methyl-2-piperidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 1040150-51-3 CAPLUS

CN 2-Piperidinetridecanol, 5-hydroxy- α , 6-dimethyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:619491 CAPLUS

DOCUMENT NUMBER: 148:585720

TITLE: Indolesulfonamides as SFRP-1 modulators and their

preparation, pharmaceutical compositions and use in

the treatment of diseases

INVENTOR(S): Welmaker, Gregory Scott; Wilson, Matthew Alan; Moore,

William Jay; Kern, Jeffrey Curtis; Trybulski, Eugene

US 2006-865261P

P 20061110

John

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 158pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

E	PATENT	NO.	KIN	D	DATE		APPLICATION NO.						DATE				
- V	 √O 2008	06099	 98		A1	_	2008	0522	,	 WO 2	 007-1	 JS84:	 245		2	 0071:	 109
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
	KM, KN, KP				KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
	MG, MK, MN,				MW,	MX,	MY,	ΜZ,	NA,	NG,	ΝI,	NO,	NΖ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		KΖ,	MD,	RU,	ТJ,	TM											
PRIORI	ITY APP	LN.	INFO	.:	, , -, -,			US 2006-865258P]	P 20061110			

OTHER SOURCE(S): MARPAT 148:585720

GΙ

AB Indolesulfonamide compds. of formula I or pharmaceutically acceptable salts thereof, are provided, which are modulators of secreted frizzled related protein-1. The compds., and compns. containing the compds., can be

used to treat a variety of disorders, including osteoporosis. Compds. of formula I wherein R1 is (perfluoro)alkyl, halo, CN and CO2-alkyl; R2 is (un)substituted alkyl, cycloalkyl and (spiro)heterocycloalkyl; R3 is (un)substituted aryl; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II+HCl was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their SFRP-1 modulatory activity. From the assay, it was determined that compound II exhibited IC50 value of 0.27 μM and an EC50 value of 0.66 μM .

IT 1027067-96-4P 1027069-16-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of indolesulfonamides as secreted frizzled related protein-1 modulators useful in the treatment of diseases) 1027067-96-4 CAPLUS

1H-Indole-3-sulfonamide, 1-(phenylsulfonyl)-N-(2,2,6,6-tetramethyl-4-piperidinyl)-4-(trifluoromethyl)- (CA INDEX NAME)

RN

CN

RN 1027069-16-4 CAPLUS

CN 1H-Indole-3-sulfonamide, 4-(1-methylethyl)-1-(phenylsulfonyl)-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:551346 CAPLUS

DOCUMENT NUMBER: 148:526342

TITLE: White polyester film for light reflective plate INVENTOR(S): Fujii, Hideki; Tanaka, Kazunori; Okuda, Masahiro

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: PCT Int. Appl., 46pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

	PAT	ENT'	NO.			KIND DAT											ATE	
	WO	2008	 0537	 39				2008									0071	023
		W:	ΑE,	AG,	AL,	ΑM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
			GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
			KM,	KN,	KΡ,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
			MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW				
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
			ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
			GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIO	BY, KG, KZ, MD, RU, TJ, TM [ORITY APPLN. INFO.: JP 2006-292294 A 20061027																	
AB																		l display
								ien u										
								e liq										high
								te p										
								coe										
	450	-600	nm	and	the	esti	mate	ed re	flec	tanc	e at	560	nm	are :	≤ -0	.011	0 (응	/nm)
					resp	., f	or c	ne s	ide	of t	he w	hite	pol	yest:	er f	ilm.		
IT		1170																
	RL:							eere							ses)			
			_	_			m fo	or li	ght :	refl	ecti [.]	ve p	late)				
RN	-	1170	-		-	-												
CN								-, 2-										
																1-ox	0-2-	propen-
								nediy										
								2,2,6			meth	y1-4	-pip	erid	inyl			
	2-m	ethy	1-2-	prop	enoa	te	(CA	INDE:	X NA	ME)								

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CRN 15625-89-5 CMF C15 H20 O6

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} \text{H}_2\text{C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-C-C-OMe} \end{array}$$

INVENTOR(S):

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:530160 CAPLUS

DOCUMENT NUMBER: 148:517749

TITLE: Preparation of 6-aminocarbonyl-2-phenylpyrimidine

derivatives as P2Y12 receptor antagonists Caroff, Eva; Hilpert, Kurt; Meyer, Emmanuel

PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd., Switz.

SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT :		KIN	D i	DATE			APPL	ICAT		DATE							
					_												
WO 2008	0503	01		A2		2008	0502	1	wo 2	007-	IB54	325		20071024			
W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	
						LA,											
	MG.	MK.	MN.	MW.	MX.	MY.	MZ.	NA.	NG.	NI.	NO.	NZ.	OM.	PG.	PH.	PL.	

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PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            WO 2006-IB53929
                                                                A 20061025
OTHER SOURCE(S):
                         MARPAT 148:517749
```

GΙ

AΒ The title compds. I [R1 = Ph optionally substituted by halo, Me, OMe, CF3, OCF3; R2 = alkoxyalkoxyalkyl, dihydroxyalkyl, dimethoxyalkyl, 2,2-dimethyl-[1,3]dioxolan-4-yl, 2,2,6,6-tetramethylpiperidin-4-yl,cycloalkyl substituted with O, S, NH, NR3, SO, SO2; R3 = alkyl, arylalkyl; R4, R5 = H, Me; R6 = alkoxy; Y = alkylene, phenylalkylene; Z = OH, COOH, CN, tetrazolyl, COOR7; R7 = alkyl] and their salt derivs. were prepared as P2Y12 receptor antagonists. For example, glutamic acid-derived title compound II was prepared in a stepwise fashion from starting materials 1-ethoxycarbonylpiperazine, Cbz-Glu(OBu-t)-OH, 6-chloro-2-phenylpyrimidine-4-carboxylic acid and N-benzyl-4-hydroxypiperidine. In an P2Y12 receptor binding assay, II demonstrated 71 nM at IC50. 1021703-03-6P

ΙT RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of phenyl(aminocarbonyl)pyrimidine derivs. as P2Y12 receptor antagonists)

RN 1021703-03-6 CAPLUS

1-Piperazinepentanoic acid, 4-(ethoxycarbonyl)- δ -oxo- γ -[[[2-CN phenyl-6-[(2,2,6,6-tetramethyl-4-piperidinyl)oxy]-4pyrimidinyl]carbonyl]amino]-, 1,1-dimethylethyl ester, (γS) -INDEX NAME)

Absolute stereochemistry.

IT 1021702-92-0P

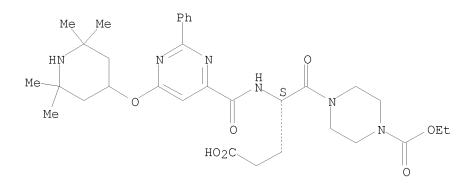
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenyl(aminocarbonyl)pyrimidine derivs. as P2Y12 receptor antagonists)

RN 1021702-92-0 CAPLUS

CN 1-Piperazinepentanoic acid, 4-(ethoxycarbonyl)- δ -oxo- γ -[[[2-phenyl-6-[(2,2,6,6-tetramethyl-4-piperidinyl)oxy]-4-pyrimidinyl]carbonyl]amino]-, (γ S)- (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:504716 CAPLUS

DOCUMENT NUMBER: 148:473818

TITLE: Primer compositions for use with polysiloxane coatings

INVENTOR(S): Higuchi, Koichi; Yamaya, Masaaki PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 24pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1914259	A1	20080423	EP 2007-254149	20071019
R: AT, BE, BG,	CH, CY	. CZ. DE. D	OK, EE, ES, FI, FR, GB,	GR, HU, IE,

IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS JP 2008120986 20080529 JP 2007-36412 20070216 Α US 2007-870685 US 20080096029 Α1 20080424 20071011 PRIORITY APPLN. INFO.: JP 2006-285173 A 20061019 JP 2007-36412 A 20070216

AΒ A primer composition for a polysiloxane hard coating comprises (a) a vinyl polymer comprising a hydrolyzable silvl group and/or SiOH group and an organic UV absorbing group bonded to its side chain, and (b) fine silica particles dispersed in an organic solvent, wherein the primer layer formed after coating and curing has a coefficient of linear expansion up to 150 + $10-6/^{\circ}$. Thus, a monomer solution was prepared by dissolving 2-[2'-hydroxy-5'-(2-methacryloxyethyl)phenyl]-2H-benzotriazole RUVA 93 (67.5), γ -methacryloxypropyltrimethoxysilane (90), Me methacrylate (270), and glycidyl methacrylate (22.5) in diacetone alc. (350 g), and an initiator solution was prepared by dissolving 2,2'-azobis(2methylbutyronitrile) (2.3) in acetone alc. (177.7 g). The monomer solution (240) and the initiator solution (54) were sequentially added under nitrogen into diacetone alc. (152 g) preheated to 80°, the reaction mixture was stirred at 80° for 30 min, the remaining monomer solution and the remaining initiator solution were simultaneously added dropwise at $80-90^{\circ}$ over 1.5 h, and the mixture was stirred at $80-90^{\circ}$ for 5 h to obtain a polymer having an UV-absorbing monomer content of 15%, a trimethoxysilyl-containing monomer content of 20%, and a weight-average mol. weight of

60,800. To prepare a primer composition, the polymer solution (100 parts, solids)

was mixed with a 30%-dispersion of silica particles (10-15 nm) in propylene glycol monomethyl ether acetate (18 parts, solids), followed by dilution with a 20/80-mixture of diacetone alc. and propylene glycol monomethyl ether to a solids content of 10%.

IT 1020264-03-2DP, reaction products with acetic anhydride and hexamethyldisilazane

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(primer compns. for use with polysiloxane coatings)

RN 1020264-03-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 2-[[3-(diethoxymethylsilyl)propoxy]methyl]oxirane, ethenyl acetate, methyl 2-methyl-2-propenoate, 2-oxiranylmethyl 2-methyl-2-propenoate, 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate, N1-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 2897-60-1 CMF C11 H24 O4 Si

CM 4

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 5

CRN 1760-24-3 CMF C8 H22 N2 O3 Si

$$\begin{array}{c} \text{OMe} \\ | \\ \text{MeO-Si-(CH2)}_3 - \text{NH-CH}_2 - \text{CH}_2 - \text{NH}_2 \\ | \\ \text{OMe} \end{array}$$

CM 6

CRN 108-05-4 CMF C4 H6 O2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} \text{O} & \text{O} & \text{CH}_2 \\ & \parallel & \parallel \\ \text{CH}_2\text{-O-C-C-Me} \end{array}$$

CM 8

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:502589 CAPLUS

DOCUMENT NUMBER: 148:497012

TITLE: Resin composition and molded article produced from the

composition

INVENTOR(S): Shibuya, Atsushi; Kumamoto, Yukihiro; Wada, Masaru;

Abe, Shota; Terado, Yuji; Mita, Naruyoshi; Matoishi,

Kaori

PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan

SOURCE: PCT Int. Appl., 138pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE		j	APPL	ICAT	ION 1		DATE			
WO	2008	0474	 68		A1	_	2008	0424	1	 WO 2	007-	 JP11	02		2	0071	011
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	$ ext{ME}$,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML ,	MR,	ΝE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,

BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2006-283105 A 20061017

The invention relates to a resin composition comprising 100 parts by mass of a polymer having an alicyclic structure in at least a part of a repeating unit and 0.05 to 5 parts by mass of a hindered amine compound having a carbon atom at a ratio of 67 to 80 wt% inclusive in the mol. structure and having a mol. weight of 500 to 3500 inclusive; a novel piperidine derivative having a piperidylaminotriazine skeleton; a molded article such as an optical component, which is produced by molding the resin composition; and an optical pickup device which utilizes the optical component.

IT 1021178-30-2P, N,N',N''-Trilauryl-N,N'-bis(2,2,6,6 tetramethylpiperidinyl)-1,3,5-triazine-2,4,6-triamine
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
 (Preparation); USES (Uses)

(LTADA; production of hindered amine compound for resin composition and $\ensuremath{\mathsf{molded}}$

article)

RN 1021178-30-2 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N2,N4,N6-tridodecyl-N2,N4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

IT 1021178-33-5P, N,N'-Dibutyl-N''-dodecyl-N,N'-bis(2,2,6,6 tetramethyl-4-piperidinyl)-1,3,5-triazine-2,4,6-triamine
 1021178-34-6P, N,N',N''-Tributyl-N,N'-bis(2,2,6,6-tetramethyl-4 piperidinyl)-1,3,5-triazine-2,4,6-triamine 1021178-35-7P,
 N,N'-Dibutyl-N'',N''-dioctyl-N,N'-bis(2,2,6,6-tetramethyl-4-piperidinyl) 1,3,5-triazine-2,4,6-triamine 1021178-38-0P,
 N-Butyl-N',N''-didodecyl-N',N''-bis(2,2,6,6-tetramethyl-4-piperidinyl) 1,3,5-triazine-2,4,6-triamine
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP

(production of hindered amine compound for resin composition and molded $\operatorname{article}$)

RN 1021178-33-5 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N2,N4-dibutyl-N6-dodecyl-N2,N4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

(Preparation); USES (Uses)

RN

CN 1,3,5-Triazine-2,4,6-triamine, N2,N4,N6-tributyl-N2,N4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

RN 1021178-35-7 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N2,N4-dibutyl-N6,N6-dioctyl-N2,N4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

RN 1021178-38-0 CAPLUS

CN 1,3,5-Triazine-2,4,6-triamine, N6-butyl-N2,N4-didodecyl-N2,N4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:474687 CAPLUS

DOCUMENT NUMBER: 148:472070

TITLE: Preparation of cyclopropylcarbonyl diarylmethyl

piperazines as calcium channel blockers

INVENTOR(S): Pajouhesh, Hassan; Pajouhesh, Hossein; Kaul, Ramesh

PATENT ASSIGNEE(S): Neuromed Pharmaceuticals Ltd., Can.

SOURCE: PCT Int. Appl., 60pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

GΙ

1	PATENT NO.						KIND DA			DATE APPLICATION NO. DA					ATE			
Ī	 WO 2	20080	0431	83		A1	_	2008	0417	1	WO 2	007-0	 CA18:	 27		2	0071	012
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
			GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
			KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
	MG, MK, MN				MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
			GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIOR	PRIORITY APPLN. INFO.:									1	US 2	006-	8515	15P	-	P 21	0061	013
OTHER	THER SOURCE(S):					MARPAT 148:47207				2070								

Ar
$$N-x1$$
 $X^{2}N(R^{2})_{2}$

AB Title compds. [I; X1, X2 = (substituted) alkylene, alkenylene, alkynylene, heteroalkylene, heteroalkenylene, heteroalkynylene; Ar = (substituted) aryl, heteroaryl; R1 = :0, :NOR', halo, cyano, OR', SR', SOR', SO2R', N(R')2, NR'SO2R', NR'COR', (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, heteroalkenyl, aryl, heteroaryl, aralkyl, heteroaralkyl, aryloxy, heteroaryloxy; R' = H, (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, heteroalkenyl, heteroalkynyl, heteroaryl, aryl, aralkyl, heteroarylalkyl; R2 = H, (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, heteroalkenyl, heteroalkynyl, aryl, heteroaryl, heteroarylalkyl, aralkyl; n = 0-4], were prepared Thus, (1R, 2R) -2-(4-benzhydrylpiperazine-1-carbonyl)-N-tertbutylcyclopropanecarboxamide [4 step preparation from di-Et (1R, 2R) -1, 2-cyclopropanecarboxylate, 1-diphenylmethylpiperazine, and tert-butylamine given] showed N-type calcium channel blocking activity with IC50 = 0.16 μ M at 0.067 Hz.

IT 1019771-37-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of cyclopropylcarbonyl diarylmethyl piperazines

as calcium channel blockers)

RN 1019771-37-9 CAPLUS

CN Cyclopropanecarboxamide, 2-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)-, (1S,2S)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:410396 CAPLUS

DOCUMENT NUMBER: 148:426904

TITLE: Preparation of phenyl(piperazinylphenyl)pyrazolo[1,5-

a]pyrimidinylamine derivatives for use as Lck

inhibitors

INVENTOR(S): Buehlmayer, Peter; Breitenstein, Werner; Furet,

Pascal; Pirard, Bernard; Von Matt, Anette; Zoller,

Thomas

PATENT ASSIGNEE(S): Novartis A.-G., Switz. SOURCE: PCT Int. Appl., 87pp.

PCT Int. Appl., 87pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PI	ATENT :	NO.			KIND DATE				APPLICATION NO.						DATE 			
WC	2008	 0374	 59		A1	_	2008	0403		wo 2	 007-:	EP83	90		2	0070	 926	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW		•	·	,	
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		•	•	•	•	•	•	MT,	•	•	•	•	•	•	•	•	•	
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GO,	GW.	ML,	MR,	NE,	SN.	TD,	TG,	BW,	
		•	•	•	•	•	•	NA,		•	•	•	•	•	•	•	•	
		•		•	•	•	ΤJ,	•	,	•	,	,	,	,	,	·	,	
PRIORIT	TY APP	,	1, 112, 110, 10, 111										A 20060928					
OTHER S	HER SOURCE(S):					PAT	148:	4269	5904									
CT																		

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. I [R1 and R2 independently = H, OH, NH2, alkoxy, etc.; provided that at least one is not H; R3 = H, halo, alkyl, or alkoxy; R4 = H, (un)substituted alkyl, or alkoxy; R5, R6, and R7 independently = H, OH,

OR8; provided that at least one is not H; R8 = alkyl, piperidine, methylmorpholine, etc.; with several provisions], and their pharmaceutically acceptable salts, are prepared and disclosed as Lck (lymphocyte specific protein tyrosine kinase) inhibitors. Thus, e.g., II was prepared by heterocyclization of 4-[4-(4-methylpiperazin-1-yl)phenyl]-2Hpyrazol-3-ylamine (preparation given) and 3-dimethylamino-2-(4nitrophenyl)acrylonitrile (preparation given) followed by reduction and amidation

with iso-Bu chloroformate. I were evaluated in biochem. Lck kinase assays, e.g., II demonstrated an IC50 value of 10 nM.

1017271-55-4P 1017271-57-6P TΤ

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenyl(piperazinylphenyl)pyrazolo[1,5-a]pyrimidinylamine derivs. for use as Lck inhibitors)

1017271-55-4 CAPLUS RM

CN Urea, N-[4-[7-amino-3-[4-(4-methyl-1-piperazinyl)phenyl]pyrazolo[1,5a]pyrimidin-6-yl]phenyl]-N'-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

1017271-57-6 CAPLUS RN

CN Urea, N-[4-[7-amino-3-[3-(4-methyl-1-piperazinyl)phenyl]pyrazolo[1,5a]pyrimidin-6-yl]phenyl]-N'-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 23 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:253345 CAPLUS

DOCUMENT NUMBER: 148:308343

TITLE: Imidazole derivatives as antiinflammatory agents and their preparation, pharmaceutical compositions and use

in the treatment of inflammation associated with

immune system impairment

INVENTOR(S): Albrecht, Wolfgang; Hauser, Dominik; Laufer, Stefan;

Striegel, Hans-Guenter; Tollmann, Karola

PATENT ASSIGNEE(S): Merckle GmbH, Germany SOURCE: PCT Int. Appl., 99pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND		DATE		APPLICATION NO.					DATE			
WO	2008023066				A1		20080228		WO 2007-EP58847					20070824				
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	ΒZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM										
EP	EP 1894925				A1 20080305				EP 2006-17677					20060824				
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	
		BA,	HR,	MK,	YU													
PRIORIT	PRIORITY APPLN. INFO.:					EP 2006-17677									A 20060824			
OTHER SO	OTHER SOURCE(S): GI				MARPAT 148:308343													

$$\begin{array}{c|c} & & & & \\ & NR^4R^5 & & & \\ & & R^1 & & \\ & & N & & SO_{0?2}-R^2 & \\ & & & R^3 & & I \end{array}$$

AB The invention relates to imidazole derivs. of formula I, which have immunomodulatory and/or cytokine release-inhibitory effects and are therefore suitable for the treatment of disorders associated with an impairment of the immune system. Compds. of formula I wherein R1 is

(un)substituted C1-6 alkyl, C1-6 oxoalkyl, C2-6 alkenyl, C3-7 cycloalkyl, C3-7 cycloalkyl-C1-6 alkyl, etc.; R2 is (un)substituted C1-6 alkyl, (un)substituted phenyl-C1-4 alkyl, (un)substituted C2-6 alkenyl, (un)substituted C2-6 alkynyl and (un)substituted phenyl; R1R2 together is (CH2)2-3; R3 is (un)substituted phenyl; R4 is H, C1-4 alkyl, Ph, benzyl, C1-6 alkoxy-C1-6 alkyl, C1-6 alkoxy-C3-7 cycloalkyl, hydroxy-C1-6 alkyl and hydroxy-C3-7 cycloalkyl; R5 is C1-6 alkoxy-C1-6 alkyl, C1-6 alkoxy-C3-7 cycloalkyl, hydroxy-C3-7 cycloalkyl, hydroxy-C3-7 cycloalkyl, C3-7 oxocycloalkyl, etc.; and their optical isomers and physiol. tolerated salts thereof, are claimed. Example compound II was prepared by N-arylation of (1-ethylpyrrolidin-2-yl)methylamine with 2-fluoro-4-[5-(4-fluorophenyl)-3-(2-methoxyethyl)-2-methylsulfanyl-3H-imidazol-4-yl]pyridine. All the invention compds. were evaluated for their antiinflammatory activity. From the assay, it was determined that compound II and some of the other tested compds. exhibited the IC50 values of less than 1 μM .

IT 1009307-91-8P, N-[4-[5-(4-Fluorophenyl)-3-methyl-2-methylsulfanyl-3H-imidazol-4-yl]pyridin-2-yl]-2,2,6,6-tetramethylpiperidin-4-ylamine 1009307-92-9P, N-[4-[5-(4-Fluorophenyl)-3-(2-methoxyethyl)-2-methylsulfanyl-3H-imidazol-4-yl]pyridin-2-yl]-2,2,6,6-tetramethylpiperidin-4-ylamine

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate and intermediate; preparation of imidazole derivs. as antiinflammatory agents useful in treatment of inflammation associated with immune system impairment)

RN 1009307-91-8 CAPLUS

CN 2-Pyridinamine, 4-[4-(4-fluorophenyl)-1-methyl-2-(methylthio)-1H-imidazol-5-yl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

RN 1009307-92-9 CAPLUS

CN 2-Pyridinamine, 4-[4-(4-fluorophenyl)-1-(2-methoxyethyl)-2-(methylthio)-1H-imidazol-5-yl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

IT 1009307-97-4P, N-[4-[5-(4-Fluorophenyl)-2-methylsulfinyl-3-methyl-3H-imidazol-4-yl]pyridin-2-yl]-2,2,6,6-tetramethylpiperidin-4-ylamine <math>1009307-98-5P, N-[4-[5-(4-Fluorophenyl)-2-methylsulfinyl-3-(2-methoxyethyl)-3H-imidazol-4-yl]pyridin-2-yl]-2,2,6,6-tetramethylpiperidin-4-ylamine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of imidazole derivs. as antiinflammatory agents useful in treatment of inflammation associated with immune system impairment)

RN 1009307-97-4 CAPLUS

CN 2-Pyridinamine, 4-[4-(4-fluorophenyl)-1-methyl-2-(methylsulfinyl)-1H-imidazol-5-yl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

RN 1009307-98-5 CAPLUS

CN 2-Pyridinamine, 4-[4-(4-fluorophenyl)-1-(2-methoxyethyl)-2-(methylsulfinyl)-1H-imidazol-5-yl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)-(CA INDEX NAME)

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS 8 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:223700 CAPLUS

DOCUMENT NUMBER: 148:285056

Preparation of N-pyridinyl benzamides derivatives as TITLE:

cytokine inhibitors

Boman, Erik; Ernst, Justin; Montalban, Antonio INVENTOR(S):

Garrido; Larson, Christopher; Lum, Christopher; Pei, Yazhong; Sebo, Lubomir; Urban, Jan; Wang, Zhijun; Zhu,

Jay

PATENT ASSIGNEE(S): Kemia, Inc., USA

SOURCE: PCT Int. Appl., 309pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION 1	. O <i>l</i> .		D.	ATE	
W(2008	0213	88		A1	_	2008		;	——— WO 2	 007-1	 US18	 049		2	0070	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AΖ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	MT									
PRIORI:	IORITY APPLN. INFO.:									US 2	006-	8387	95P		P 2	0060	817
	(101(111 1111 1114 1111 0									US 2	007-	8914	70P		P 2	0070	223

OTHER SOURCE(S): MARPAT 148:285056

GΙ

AB The title compds. I [X = CH, N or NO; Y = CH, N, NO, provided that X and Y are not both CH or NO; A = halo, alkyl, alkoxy, etc.; G = (un)substituted (hetero)aryl; Ar = 6-membered aryl or heteroaryl; L1 = CONH; L2 = a bond, CONH, CONHCH2, etc.; Q = (un)substituted alkyl, cycloalkyl, aryl, etc.; R = H or alkyl; n = 0-2; with the provision] were prepared and disclosed as cytokine inhibitors. E.g., a multi-step synthesis of II, starting from 2-methyl-3-bromo-5-nitropyridine, was given. Each of 345 exemplified compds. I listed in a table was tested in the TNF α ELISA assay and was found to have activity therein, with most compds. having IC50s below 10 μ M in this assay. In particular, I are useful as anti-inflammatory agents. Further disclosed are methods for their use in preventing or treating conditions mediated by cytokines, such as for example arthritis, pain, and cancer.

IT 1008135-95-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-pyridinyl benzamides as cytokine inhibitors useful in treating and preventing cytokine-mediated diseases)

RN 1008135-95-2 CAPLUS

CN 1H-1,2,3-Triazole-4-carboxamide, 1-[5-[[3-cyano-5-(1,1-dimethylethyl)benzoyl]amino]-2-methyl-3-pyridinyl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

PAGE 2-A

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:183363 CAPLUS

DOCUMENT NUMBER: 148:240034

TITLE: Light stabilizer group-containing siloxane oligomers

and their manufacture

INVENTOR(S): Honma, Takayuki; Kubota, Toru; Kiyomori, Ayumi PATENT ASSIGNEE(S): Shin-Etsu Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008031077	A	20080214	JP 2006-205857	20060728
PRIORITY APPLN. INFO.:			JP 2006-205857	20060728
AR Title oligomers has	7inα >1	hindered	amino group-containing	organic group

AB Title oligomers having ≥1 hindered amino group-containing organic groups and ≥1 alkoxy or OH groups per mol. are manufactured by hydrolysis and

condensation of (A) R1Si(OR2)3 or (B) R1R3mSi(OR2)3-m with R4nSi(OR2)4-n [R1 = hindered amino-containing monovalent organic group; OR2 = C1-10 alkoxyl; = C1-30 (un)substituted monovalent hydrocarbyl; R4 = C1-30 (un)substituted monovalent hydrocarbyl, 1-5 Si-containing group; m = 0-2; when m = 0, then n = 00-3; when m = 1, 2, then n = 0, 1]. Thus, 3-(2,2,6,6tetramethylpiperidinyl-4-oxy)propyltrimethoxysilane was refluxed with AcONa in MeOH and H2O for 3 h to give transparent oil with viscosity 5200 mm2/s at 25° . 1006028-96-1P, Propyltrimethoxysilane-[3-(2,2,6,6tetramethylpiperidinyl-4-oxy)propyltrimethoxysilane copolymer 1006028-98-3P, 3-Methacryloxypropyltrimethoxysilane-[3-(2,2,6,6tetramethylpiperidinyl-4-oxy)propyltrimethoxysilane copolymer 1006029-00-0P, [3-(2,2,6,6-Tetramethylpiperidinyl-4oxy)propyltriethoxysilane homopolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (oligomeric; manufacture of hindered amine-modified siloxane oligomers as light stabilizers) 1006028-96-1 CAPLUS Piperidine, 2,2,6,6-tetramethyl-4-[3-(trimethoxysilyl)propoxy]-, polymer with trimethoxypropylsilane (CA INDEX NAME) CM CRN 104086-94-4 C15 H33 N O4 Si CMF Ме

R3

RN CN

CM 2

CRN 1067-25-0 CMF C6 H16 O3 Si

RN 1006028-98-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with 2,2,6,6-tetramethyl-4-[3-(trimethoxysilyl)propoxy]piperidine (CA INDEX NAME)

CM 1

CRN 104086-94-4

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

RN 1006029-00-0 CAPLUS

CN Piperidine, 2,2,6,6-tetramethyl-4-[3-(triethoxysilyl)propoxy]-, homopolymer (CA INDEX NAME)

CM 1

CRN 102089-34-9 CMF C18 H39 N O4 Si

Me H Me Me OEt OCCH2)
$$3-Si-OEt$$
 OEt

L8 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:175807 CAPLUS

DOCUMENT NUMBER: 148:280306

TITLE: Six naphthylisoquinoline alkaloids and a related

benzopyranone from a Congolese Ancistrocladus species

related to Ancistrocladus congolensis

AUTHOR(S): Bringmann, Gerhard; Spuziak, Joanna; Faber, Johan H.;

Gulder, Tanja; Kajahn, Inga; Dreyer, Michael; Heubl,

Guenther; Brun, Reto; Mudogo, Virima

CORPORATE SOURCE: Institute of Organic Chemistry, University of

Wuerzburg, Wuerzburg, D-97074, Germany

SOURCE: Phytochemistry (Elsevier) (2008), 69(4), 1065-1075

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB From the roots of a recently discovered Ancistrocladus taxon, with close affinities to Ancistrocladus congolensis regarding mol. ITS sequence data, six naphthylisoquinoline alkaloids, 5'-O-demethylhamatine (2), 5'-O-demethylhamatinine (3), 6-O-demethylancistroealaine A (4), 6,5'-O,O-didemethylancistroealaine A (5), 5-epi-6-O-methylancistrobertsonine A (6), and 5-epi-4'-O-demethylancistrobertsonine C (7), have been isolated, along with a likewise benzopyranone carboxylic acid, 8. The structural elucidation succeeded by chemical, spectroscopic, and chiroptical methods. Their bioactivities were tested against

and chiroptical methods. Their bioactivities were tested against protozoan parasites causing severe tropical diseases. Furthermore, eight known related alkaloids were identified.

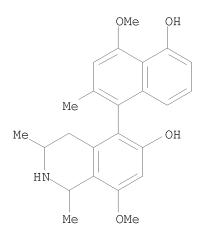
IT 1008775-69-6P

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(alkaloids and related benzopyranone from Congolese Ancistrocladus species related to Ancistrocladus congolensis)

RN 1008775-69-6 CAPLUS

CN 6-Isoquinolinol, 1,2,3,4-tetrahydro-5-(5-hydroxy-4-methoxy-2-methyl-1-naphthalenyl)-8-methoxy-1,3-dimethyl-, (1S,3S,5R)- (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:159325 CAPLUS

DOCUMENT NUMBER: 148:242409

TITLE: Sterically hindered amines containing the

tetramethylpiperidinyl group as lubricating oil

stabilizers

INVENTOR(S): Chasan, David Eliezer; Wilson, Patricia Roberta;

Ribeaud, Marc

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 13pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	PATENT NO.					D	DATE			APPL	ICAT	ION I	NO.			ATE	
			_		A2 A3		2008 2008		,	WO 2	007-	EP57	552			0070	
710 2		AE,	AG,	AL,	AM,	ΑT,	AU,	AZ,									
		•	•		•		CZ,		•	•	•	•	•	•	•	•	•
					•		GΤ,			•							
		•	•	•	•	•	LA,	•	•	•	•	,	•		•		•
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NΑ,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AP,	EA,	EP,	OA					
US 2	US 20080051306						2008	0228		US 2	007-	8817	18		2	0070	727
PRIORITY	IORITY APPLN. INFO.:									US 2	006-	8343	83P		P 2	0060	731
OTHER SOU	IER SOURCE(S):					PAT	148:	2424	9								
GI																	

AB Sterically hindered amines, with an N-H bond, for stabilizers and antioxidants in lubricating oils, are 2,2,6,6-tetramethylpiperidinyl group-containing esters of formulas I and II, in which R is linear or branched C7-17-alkyl and n=6-18. The sterically hindered amines are non-aggressive towards fluoroelastomer O-rings or seals. IT 1005494-52-9

RL: MOA (Modifier or additive use); USES (Uses) (antioxidant-stabilizers; sterically hindered amines containing the tetramethylpiperidinyl group as lubricating oil stabilizers)

RN 1005494-52-9 CAPLUS

CN Decanedioic acid, 1-(2,2,6,6-tetramethyl-4-piperidinyl)10-(2,2,6-trimethyl-4-piperidinyl) ester (CA INDEX NAME)

ANSWER 28 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

2008:124384 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 148:192752

TITLE: Improved processing conditions of polyethylene

articles in course of their manufacture by melt

processing

Dongiovanni, Ernesto; Supat, Korada; Saisuwan, INVENTOR(S):

Warangkana; Kroehnke, Christoph

PATENT ASSIGNEE(S): Clariant International Ltd, Switz.

PCT Int. Appl., 48pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIN:	D	DATE			APPL	ICAT	ION 1	. OV		D	ATE	
WO 2008012	 319		A1	_	2008	0131	,	WO 2	007-	EP57	 647		2	0070	725
W: AE	, AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
СН	, CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
GB	, GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
KM	, KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
MG	, MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
PT	, RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
TR	, TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
RW: AT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
IS	, IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
ВЈ	, CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
GH	, GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
BY	, KG,	KΖ,	MD,	RU,	ТJ,	TM									

PRIORITY APPLN. INFO.:

EP 2006-291216 A 20060725 The manufacture of polyethylene based wall articles with improved color and processing conditions, can be surprisingly reached by the use of a specific combination of stabilizers. The combination COMB of compds. comprises a component A, a component B and a component D; wherein the component A comprises a compound obtainable by reacting PC13 with 4,4'-thiobis-(6-t-butyl-m-cresol); the component B is selected from the group consisting of the compds. of tris(2,4-di-tert-butylphenyl)phosphite, bis(2,4-di-t-butylphenyl)pentaerythritol diphosphite and tetrakis(2,4-di-tert-butylphenyl)[1,1 -biphenyl]-4,4'-diylbisphonite; the component D is selected from the group consisting of the compds. of N, N'-bis(2, 2, 6, 6-tetramethyl-4-piperidyl) hexamethylenediamine and 2,4-dichloro-N-(1,1,3,3-tetramethylbutyl)-1,3,5-triazin-2-amine copolymer, polymer of 2,2,4,4-tetramethyl-7-oxa-3,20-diaza-dispiro [5.1.11.2]-heneicosan-21-on and epichlorohydrine, 1,6-Hexanediamine, N, N'-bis(2, 2, 6, 6-tetramethyl-4-piperidinyl)-, polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products with, N-butyl-1-butanamine and N-butyl-2,2,6,6-tetramethyl-4-piperidinamine,poly-[1 -(2'-Hydroxyethyl)-2,2,6,6-tetramethyl-4-hydroxy piperidylsuccinate. Component D is also selected from poly-[(6-morpholino-s-triazine-2,4-diyl)[2,2,6,6-tetramethyl-4-piperidyl)

imino]-hexamethylene-[(2,2,6,6-tetramethyl-4-piperidyl) imino]],
1,3-Bis-[2'-cyano-3',3-diphenylacryloyl)oxy]-2,2-bis- {
[2-cyano-3',3'-diphenylacryloyl)oxy]methyl } propane and propanedioic acid
[(4-methoxyphenyl)-methylene]-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)
ester,) and the combination of the compds. of [N,N'-bis(2,2,6,6tetramethyl-4-piperidyl)hexamethylenediamine 2,4-dichloro-N-(1,1,3,3tetramethylbutyl)- 1,3,5-triazin-2-amine] copolymer and poly[1
-(2'-hydroxyethyl)-2,2,6,6-tetramethyl-4-hydroxy piperidylsuccinate]; and
optionally comprises at least one component selected from the group
consisting of component C, component E and component F; the component C
being a primary sterically hindered phenol based antioxidant, the
component E being a UV absorber, and the component F being an anti-acid.

IT 1004523-26-5D, alkyl derivative

RL: TEM (Technical or engineered material use); USES (Uses) (improved processing conditions of polyethylene articles)

RN 1004523-26-5 CAPLUS

CN Poly[[2,5-dioxo-1-(2,2,6,6-tetramethyl-4-piperidinyl)-3,4-pyrrolidinediyl]-1,2-ethanediyl] (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:97048 CAPLUS

DOCUMENT NUMBER: 148:191958

TITLE: Benzothiophene derivatives, processes for preparing

them, pharmaceutical compositions containing them, and

their use as inhibitors of Rho kinase

INVENTOR(S): Kahraman, Mehmet; Borchardt, Allen J.; Cook, Travis

G.; Davis, Robert L.; Gardiner, Elisabeth M. M.;

Malecha, James W.; Noble, Stewart A.; Prins, Thomas J.

PATENT ASSIGNEE(S): Borchardt, Allen, J., USA; Cook, Travis, G.; Davis,

Robert, L.; Gardiner, Elisabeth, M.M.; Malecha, James,

W.; Noble, Stewart, A.; Prins, Thomas, J.

SOURCE: PCT Int. Appl., 184 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE		-	APPL	ICAT	ION I	NO.		D.	ATE	
WO 2008				A2 A3		2008 2008		,	WO 2	007-	US73	971		2	0070	720
₩:	GB, KM,	CN, GD, KN,	CO, GE, KP,	CR, GH, KR,	CU, GM, KZ,	AU, CZ, GT, LA, MY,	DE, HN, LC,	DK, HR, LK,	DM, HU, LR,	DO, ID, LS,	DZ, IL, LT,	EC, IN, LU,	EE, IS, LY,	EG, JP, MA,	ES, KE, MD,	FI, KG, ME,

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PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     US 20080021217
                          Α1
                                 20080124
                                             US 2007-780735
                                                                     20070720
     US 20080021026
                          Α1
                                 20080124
                                             US 2007-780834
                                                                     20070720
PRIORITY APPLN. INFO.:
                                             US 2006-832634P
                                                                    20060720
                                             US 2007-915772P
                                                                    20070503
OTHER SOURCE(S):
                         MARPAT 148:191958
GΙ
```

$$A^{G^1}G^2$$

Ι

The invention relates to heteroaryl compds. I, processes for preparing them, pharmaceutical prepns. comprising them, and their pharmaceutical use. I are inhibitors of Rho kinase, useful in the treatment of, e.g., hypertension, etc. In compds. I, A is (un)substituted heteroaryl; G1 is (un)substituted fused bicyclic heteroaryl; G2 is (un)substituted (CH2)mZ(CH2)p and null, wherein m and p are 0 to 4, Z is (un)substituted NH, NHC(O), O, C(O), or null, etc.; G3 is (un)substituted alkyl, aryl, alkoxy, etc.; G4 is H, halo, (un)substituted NH2, alkyl, alkoxy, etc.; including pharmaceutically acceptable salts, esters, or prodrugs thereof. For instance, the invention compound II was prepared and gave 9.5% (or 18.6%) lowering of IOP (intraocular pressure) vs. control at 0.3% (or 1.0%) in monkeys.

IT 1003906-21-5P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzothiophene derivs. as inhibitors of Rho kinase)

RN 1003906-21-5 CAPLUS

CN Benzo[b]thiophene-5-carboxamide, 2-(2-amino-4-pyrimidinyl)-3-methyl-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

L8 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:94297 CAPLUS

DOCUMENT NUMBER: 148:169500

TITLE: Crosslinked (meth)acrylic ester copolymer and

secondary-battery electrode using the same

INVENTOR(S): Fujimoto, Nobutaka; Ueda, Koji

PATENT ASSIGNEE(S): Sumitomo Seika Chemicals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 32pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
	WO 200	 80103	56		 A1	_	2008	0124		WO 2	 007-	 JP61	311		2	0070	604
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KM,
		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	ΝI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TΤ,
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW						
	RW	: AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	${ m MZ}$,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	$^{\mathrm{TM}}$									
	JP 200	80450	96		Α		2008	0228		JP 2	006-	2377	85		2	0060	901
PRIO	IORITY APPLN. INFO.:									JP 2	006-	1972	90		A 2	0060	719
										JP 2	006-	2377	85		A 2	0060	901
\cap T																	

GΙ

ΙI

AB A crosslinked (meth)acrylic ester copolymer having good stability to solvents and crack resistance, is obtained by polymerizing a (meth)acrylic acid imino compound I (R = H, methyl) with a (meth)acrylic acid ester in the presence of a crosslinking agent and nitrooxidn, reacting the polymer.

IT 1002322-80-6DP, oxidized 1002322-81-7DP, oxidized 1002322-82-8DP, oxidized

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked (meth)acrylic ester copolymer for secondary-battery
electrode)

RN 1002322-80-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-(1,9-nonanediyl) ester, polymer with octadecyl 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 65833-30-9 CMF C17 H28 O4

CM 2

CRN 32360-05-7 CMF C22 H42 O2

$$$^{\rm O}_{\rm H2}$$$
 Me $^{\rm CH_2}$) 17 $^{\rm T}$ O $^{\rm CH_2}$

CM 3

CRN 31582-45-3 CMF C13 H23 N O2

RN 1002322-81-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 1,1'-(1,9-nonanediyl) di-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 107481-28-7 CMF C15 H24 O4

CM 2

CRN 32360-05-7 CMF C22 H42 O2

$$$^{\rm O}_{\rm H2}$$$
 Me $^{\rm CH}_{\rm 2}$) $_{\rm 17}$ – O $^{\rm C}_{\rm C}$ C $^{\rm Me}$

CM 3

CRN 31582-45-3 CMF C13 H23 N O2

RN 1002322-82-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,1'-(1,2-ethanediyl) ester, polymer with octadecyl 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{Me- (CH}_2)_{17} - \text{O-C-C-Me} \end{array}$$

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 97-90-5 CMF C10 H14 O4

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s L3

L9 77 L3

=> s L5

L10 10 L5

=>

=> s cancer

370638 CANCER

54465 CANCERS

L11 384282 CANCER

(CANCER OR CANCERS)

8

=> s L9 AND L11

L12 2 L9 AND L11

=> s L10 AND L11

L13 0 L10 AND L11

=> d L12 1-2 ibib abs hitstr

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:223700 CAPLUS

DOCUMENT NUMBER: 148:285056

TITLE: Preparation of N-pyridinyl benzamides derivatives as

cytokine inhibitors

INVENTOR(S): Boman, Erik; Ernst, Justin; Montalban, Antonio

Garrido; Larson, Christopher; Lum, Christopher; Pei, Yazhong; Sebo, Lubomir; Urban, Jan; Wang, Zhijun; Zhu,

Jav

PATENT ASSIGNEE(S): Kemia, Inc., USA

SOURCE: PCT Int. Appl., 309pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.				KIN:	D	DATE			APPL	ICAT	ION	7O.		Di	ATE	
WO	2008	0213	88		A1		2008	0221	,	WO 2	007-	JS18	 049		2	0070	816
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	ΒZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIORITY	RIORITY APPLN. INFO.:									US 2	006-	8387	95P]	2	0060	817
	LORITY APPLN. INFO.:								•	US 2	007-	8914	70P]	2 2	0070	223

OTHER SOURCE(S): MARPAT 148:285056

GΙ

AB The title compds. I [X = CH, N or NO; Y = CH, N, NO, provided that X and Y are not both CH or NO; A = halo, alkyl, alkoxy, etc.; G = (un)substituted (hetero)aryl; Ar = 6-membered aryl or heteroaryl; L1 = CONH; L2 = a bond, CONH, CONHCH2, etc.; Q = (un)substituted alkyl, cycloalkyl, aryl, etc.; R

= H or alkyl; n = 0-2; with the provision] were prepared and disclosed as cytokine inhibitors. E.g., a multi-step synthesis of II, starting from 2-methyl-3-bromo-5-nitropyridine, was given. Each of 345 exemplified compds. I listed in a table was tested in the TNF α ELISA assay and was found to have activity therein, with most compds. having IC50s below 10 μ M in this assay. In particular, I are useful as anti-inflammatory agents. Further disclosed are methods for their use in preventing or treating conditions mediated by cytokines, such as for example arthritis, pain, and cancer.

IT 1008135-95-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-pyridinyl benzamides as cytokine inhibitors useful in treating and preventing cytokine-mediated diseases)

RN 1008135-95-2 CAPLUS

CN 1H-1,2,3-Triazole-4-carboxamide, 1-[5-[[3-cyano-5-(1,1-dimethylethyl)benzoyl]amino]-2-methyl-3-pyridinyl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1332992 CAPLUS

DOCUMENT NUMBER: 148:11252

TITLE: Preparation of substituted purinamines as antitumor

agents

INVENTOR(S): Bajji, Ashok C.; Kim, Se-Ho; Markovitz, Benjamin;

Trovato, Richard; Tangallapally, Rajendra; Anderson,

Mark B.; Wettstein, Daniel; Shenderovich, Mark;

Vanecko, John A.

PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA

SOURCE: PCT Int. Appl., 477pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	PATENT NO.				KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
· · · -	2007				A2		2007			WO 2	007-	JS68	899		2	0070	514
WO	2007	1342	98		А3		2008	0731									
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		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	ΜZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AP,	EA,	EP,	OA					
US	2007	0299	258		A1		2007	1227		US 2	007-	7483	62		2	0070	514
PRIORIT	Y APP	LN.	INFO	.:						US 2	006-	7998	74P		P 2	0060	512
										US 2	006-	8221	59P		P 2	0060	811
										US 2	006-	8651	40P		P 2	0061	109
										US 2	007-	8837	07P		P 2	0070	105
OTHER S	OURCE	(S):			MAR	PAT	148:	1125	2								

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I-III [A, B = (un)substituted aryl, heteroaryl, heterocyclyl, cycloalkyl; R1 = H, alkyl, aryl, heteroaryl, etc.; L1, L2 = (CH2)n(CH2)n, (CH2)nC(O)(CH2)n, (CH2)nC(O)N(CH2)n, etc.; n = 0-8], useful for treating Hsp90 dependent disorders such as cancer, were prepared and claimed. Thus, reacting 8-(2,5-dimethoxyphenylsulfanyl)-9H-purin-6-ylamine with (2-bromoethyl)benzene in the presence of Barton's base in DMF afforded 9% IV and 8% V. Compds. I were evaluated for binding to purified Hsp90 (data given).

IT 958016-75-6P 958016-81-4P 958016-93-8P

958016-95-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted purinamines as antitumor agents)

RN 958016-75-6 CAPLUS

CN 3H-Purin-6-amine, 8-[(6-bromo-1,3-benzodioxol-5-yl)thio]-3-[2-(2,2,6,6-

tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-74-5

CMF C23 H29 Br N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-81-4 CAPLUS

CN 9H-Purin-6-amine, 8-[(6-bromo-1,3-benzodioxol-5-yl)thio]-9-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-80-3

CMF C23 H29 Br N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-93-8 CAPLUS

CN 3H-Purin-6-amine, 8-[(2,5-dimethoxyphenyl)thio]-3-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-92-7 CMF C24 H34 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-95-0 CAPLUS

CN 9H-Purin-6-amine, 8-[(2,5-dimethoxyphenyl)thio]-9-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-94-9 CMF C24 H34 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 140.35 499.12 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -18.40-18.40

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STRUCTURE FILE UPDATES: 17 AUG 2008 HIGHEST RN 1041629-70-2 DICTIONARY FILE UPDATES: 17 AUG 2008 HIGHEST RN 1041629-70-2

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

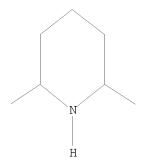
http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\STNEXP\Queries\10502080 Broad.str

L14 STRUCTURE UPLOADED

=> d L14 L14 HAS NO ANSWERS L14 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1 sss sam
SAMPLE SEARCH INITIATED 13:52:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 464993 TO ITERATE

0.4% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 9260939 TO 9338781
PROJECTED ANSWERS: 12365 TO 15533

L15 3 SEA SSS SAM L1

=> s L15 sss full FULL SEARCH INITIATED 13:53:11 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9296204 TO ITERATE

6.1% PROCESSED 562888 ITERATIONS

936 ANSWERS
1268 ANSWERS

3 ANSWERS

10.8% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.37

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: 9296204 TO 9296204 PROJECTED ANSWERS: 11462 TO 12112 => file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
179.28 678.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -18.40

FILE 'CAPLUS' ENTERED AT 13:54:03 ON 18 AUG 2008
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FILE COVERS 1907 - 18 Aug 2008 VOL 149 ISS 8 FILE LAST UPDATED: 17 Aug 2008 (20080817/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s angiogenesis OR cancer
46826 ANGIOGENESIS
370638 CANCER
54465 CANCERS

384282 CANCER

(CANCER OR CANCERS)

L17 416294 ANGIOGENESIS OR CANCER

=> s L16

L18 77 L16

=> s L17 AND L18

L19 3 L17 AND L18

=> d L19 1-3 ibib abs hitstr

L19 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:223700 CAPLUS

DOCUMENT NUMBER: 148:285056

TITLE: Preparation of N-pyridinyl benzamides derivatives as

cytokine inhibitors

INVENTOR(S): Boman, Erik; Ernst, Justin; Montalban, Antonio

Garrido; Larson, Christopher; Lum, Christopher; Pei,

Yazhong; Sebo, Lubomir; Urban, Jan; Wang, Zhijun; Zhu,

Jay

PATENT ASSIGNEE(S): Kemia, Inc., USA

SOURCE: PCT Int. Appl., 309pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION I	MO.		D	ATE		
						_			•						_			
WC	2008	30213	88		A1		2008	0221	1	WO 2	007 - 1	US18	049		2	0070	816	
	W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
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		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW					
	RW	: AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM										
RIT	Y API	PLN.	INFO	.:					1	US 2	006-	8387	95P]	P 2	0060	817	

PRIOR

US 2007-891470P P 20070223

OTHER SOURCE(S): MARPAT 148:285056

GΙ

$$\begin{array}{c}
G \\
\downarrow \\
L1
\end{array}$$

$$\begin{array}{c}
R \\
\uparrow \\
Ar
\end{array}$$

$$L2-Q$$

$$X$$

$$Y$$

$$A$$

The title compds. I [X = CH, N or NO; Y = CH, N, NO, provided that X and YAΒ are not both CH or NO; A = halo, alkyl, alkoxy, etc.; G = (un)substituted (hetero)aryl; Ar = 6-membered aryl or heteroaryl; L1 = CONH; L2 = a bond, CONH, CONHCH2, etc.; Q = (un)substituted alkyl, cycloalkyl, aryl, etc.; R = H or alkyl; n = 0-2; with the provision] were prepared and disclosed as cytokine inhibitors. E.g., a multi-step synthesis of II, starting from 2-methyl-3-bromo-5-nitropyridine, was given. Each of 345 exemplified compds. I listed in a table was tested in the TNFlpha ELISA assay and was found to have activity therein, with most compds. having IC50s below 10 μM in this assay. In particular, I are useful as anti-inflammatory

agents. Further disclosed are methods for their use in preventing or treating conditions mediated by cytokines, such as for example arthritis, pain, and cancer.

IT 1008135-95-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-pyridinyl benzamides as cytokine inhibitors useful in treating and preventing cytokine-mediated diseases)

RN 1008135-95-2 CAPLUS

CN 1H-1,2,3-Triazole-4-carboxamide, 1-[5-[[3-cyano-5-(1,1-dimethylethyl)benzoyl]amino]-2-methyl-3-pyridinyl]-N-(2,2,6,6-tetramethyl-4-piperidinyl)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1454462 CAPLUS

DOCUMENT NUMBER: 148:79048

TITLE: 2-Amino-7,8-dihydropyrido[2,3-d]pyrimidin-7-one

derivatives as CSBP/RK/p38 kinase inhibitors and their preparation, pharmaceutical compositions and use in

the treatment of diseases

INVENTOR(S): Corsi, Mauro; Faiferman, Isidore; Merlo-Pich, Emilio;

Ratti, Emiliangelo; Wren, Paul Bryan

PATENT ASSIGNEE(S): Glaxo Group Limited, UK SOURCE: PCT Int. Appl., 301pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	PATENT NO.					D	DATE		-	APPL	ICAT	ION 1	NO.		D.	ATE	
– W	0 2007:	1471	03		A2	_	2007	1221		====: WO 2	007-	us71.	 314		2	0070	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
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		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
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		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
PRIORI	ORITY APPLN. INFO.:									US 2	006-	8049	93P		P 2	0060	616
OTHER	IR SOURCE(S):					PAT	148:	7904	8								

$$(R^1')_n$$
 $(R^1')_n$
 $(R^1)_n$
 $(R^1$

AB Substituted 8H-pyrido[2,3-7]pyrimidin-7-one containing compds. of formula I and compns. containing compds. of formula I and their use in therapy as CSBP/RK/p38 kinase inhibitors is disclosed. Compds. of formula I wherein dashed line is an optional double bond; G1 and G2 are independently N; R1 is (un)substituted alkylamino(thio)carbonyl, (un)substituted alkoxy(thio)carbonyl, (un)substituted alkylamino, etc.; each R1' is independently halo, C1-4 (halo)alkyl, CN, NO2, SH and derivs.,e tc.; R3 is (un)substituted C1-10 alkyl, (un)substituted C3-7 cycloalkyl, (un)substituted (hetero)aryl, etc; X is H, (un)substituted C1-10 alkyl, OH and derivs., SH and derivs., SOH and derivs., SO2 and derivs., etc.; n is

0, 1, 2, 3 and 4; and their pharmaceutically acceptable salts, solvates, and physiol. functional derivs. thereof, are claimed. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their CSBP/RK/p38 kinase inhibitory activity (some data given).

IT 960358-53-6P 960358-55-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aminodihydropyridopyrimidinone derivs. as CSBP/RK/p38 kinase inhibitors useful in the treatment of diseases)

RN 960358-53-6 CAPLUS

CN

3-Thiophenecarboxamide, N-[3-[8-(2,6-difluorophenyl)-7,8-dihydro-7-oxo-2-[(2,2,6,6-tetramethyl-4-piperidinyl)amino]pyrido[2,3-d]pyrimidin-4-yl]-4-methylphenyl]-, hydrobromide (1:1) (CA INDEX NAME)

● HBr

RN 960358-55-8 CAPLUS

CN 3-Thiophenecarboxamide, N-[3-[8-(2,6-difluorophenyl)-7,8-dihydro-7-oxo-2-[(2,2,6,6-tetramethyl-4-piperidinyl)amino]pyrido[2,3-d]pyrimidin-4-yl]-4-methylphenyl]-, sulfate (1:1) (CA INDEX NAME)

CM 1

CRN 911487-90-6 CMF C34 H34 F2 N6 O2 S

CM 2

CRN 7664-93-9 CMF H2 O4 S

L19 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1332992 CAPLUS

DOCUMENT NUMBER: 148:11252

TITLE: Preparation of substituted purinamines as antitumor

agent

INVENTOR(S): Bajji, Ashok C.; Kim, Se-Ho; Markovitz, Benjamin;

Trovato, Richard; Tangallapally, Rajendra; Anderson,

Mark B.; Wettstein, Daniel; Shenderovich, Mark;

Vanecko, John A.

PATENT ASSIGNEE(S): Myriad Genetics, Inc., USA

SOURCE: PCT Int. Appl., 477pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.)	DATE			APPL	ICAT	I NOI	. OI		DZ	ATE	
						_											
WΟ	2007	13429	98		A2		2007:	1122		WO 2	007-1	JS688	399		20	0070!	514
WO	2007	13429	98		А3		2008	0731									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BΖ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,
		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,
		GD, GE, GH, KN, KP, KR,		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,

```
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
     US 20070299258
                         A1
                                20071227
                                            US 2007-748362
                                                                   20070514
PRIORITY APPLN. INFO.:
                                            US 2006-799874P
                                                                   20060512
                                                                Р
                                            US 2006-822159P
                                                                Р
                                                                   20060811
                                            US 2006-865140P
                                                                Р
                                                                   20061109
                                            US 2007-883707P
                                                                Ρ
                                                                   20070105
OTHER SOURCE(S):
                        MARPAT 148:11252
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I-III [A, B = (un)substituted aryl, heteroaryl, heterocyclyl, cycloalkyl; R1 = H, alkyl, aryl, heteroaryl, etc.; L1, L2 = (CH2)n(CH2)n, (CH2)nC(0)(CH2)n, (CH2)nC(0)N(CH2)n, etc.; n = 0-8], useful for treating Hsp90 dependent disorders such as cancer, were prepared and claimed. Thus, reacting 8-(2,5-dimethoxyphenylsulfanyl)-9H-purin-6-ylamine with (2-bromoethyl)benzene in the presence of Barton's base in DMF afforded 9% IV and 8% V. Compds. I were evaluated for binding to purified Hsp90 (data given).

IT 958016-75-6P 958016-81-4P 958016-93-8P 958016-95-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted purinamines as antitumor agents) $958016-75-6\ \ CAPLUS$

RN 958016-75-6 CAPLUS
CN 3H-Purin-6-amine, 8-[(6-bromo-1,3-benzodioxol-5-y1)thio]-3-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-74-5 CMF C23 H29 Br N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-81-4 CAPLUS

CN 9H-Purin-6-amine, 8-[(6-bromo-1,3-benzodioxol-5-yl)thio]-9-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-80-3

CMF C23 H29 Br N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-93-8 CAPLUS

CN 3H-Purin-6-amine, 8-[(2,5-dimethoxyphenyl)thio]-3-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-92-7 CMF C24 H34 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 958016-95-0 CAPLUS

CN 9H-Purin-6-amine, 8-[(2,5-dimethoxyphenyl)thio]-9-[2-(2,2,6,6-tetramethyl-4-piperidinyl)ethyl]-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 958016-94-9 CMF C24 H34 N6 O2 S

CM 2

CRN 76-05-1

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F-C-CO<sub>2</sub>H
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=> d L18 1-10

L18 ANSWER 1 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:912732 CAPLUS

DN 149:180260

TI Crosslinked diazaadamantylmethyl (meth)acrylate polymers and secondary battery electrodes using them

IN Fujimoto, Nobutaka; Ueda, Koji; Kanehara, Yuji

PA Sumitomo Seika Chemicals Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 20pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PA]	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP	2008174725	A	20080731	JP 2007-301107	20071121
PRAI	JΡ	2006-342759	A	20061220		

- L18 ANSWER 2 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2008:912360 CAPLUS
- TI Diazaadamantyl (meth)acrylate compounds and their manufacture
- IN Fujimoto, Nobutaka; Ueda, Koji; Kanehara, Yuji
- PA Sumitomo Seika Chemicals Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 10pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE 							
ΡI	JP 2008174543	A	20080731	JP 2007-301106	20071121							
PRAI	JP 2006-342758	A	20061220									

- L18 ANSWER 3 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2008:890838 CAPLUS
- TI Preparation of male contraceptive compounds
- IN Amobi, Nnaemeka Ikechukwu; Smith, Christopher
- PA King's College London, UK
- SO PCT Int. Appl., 65pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

T T 71 4 • (7147	_																
	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
						_												
ΡI	WO.	WO 2008087421			A2 200		2008	0724	,	WO 2008-GB163					20080117			
		W:	ΑE,	AG,	AL,	ΑM,	AO,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,

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KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRAI GB 2007-893
                                20070117
                          Α
    ANSWER 4 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
L18
     2008:860193 CAPLUS
AN
DN
     149:176336
     Preparation of imidazopyridine analogs as CB2 receptor modulators for
ΤТ
     treating pain, respiratory and non-respiratory diseases
     Bilodeau, Mark T.; Burgey, Christopher S.; Deng, Zhengwu James; Hartnett,
ΙN
     John C.; Kett, Nathan R.; Melamed, Jeffrey; Munson, Peter M.; Nanda,
     Kausik K.; Thompson, Wayne; Trotter, B. Wesley; Wu, Zhicai
PA
     Merck & Co., Inc., USA
SO
     PCT Int. Appl., 191pp.
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
                        KIND
     PATENT NO.
                                DATE
                                           APPLICATION NO.
                                                                   DATE
                        ____
                              20080717
PΙ
    WO 2008085302
                         A1
                                           WO 2007-US25641
                                                                   20071214
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRAI US 2006-876105P
                                20061220
                         P
RE.CNT 4
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 5 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
T-18
     2008:859444 CAPLUS
ΑN
     149:183463
DN
     Preparation and Characterization of Polymerizable Hindered Amine-Based
ΤI
     Antimicrobial Fibrous Materials
     Yao, Jinrong; Sun, Yuyu
ΑU
CS
     Biomedical Engineering Program, The University of South Dakota, Sioux
     Falls, SD, 57107, USA
     Industrial & Engineering Chemistry Research (2008), 47(16), 5819-5824
SO
     CODEN: IECRED; ISSN: 0888-5885
     American Chemical Society
PΒ
DT
     Journal
     English
LA
RE.CNT 57
              THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L18 ANSWER 6 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
ΑN
     2008:857219 CAPLUS
```

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149:176360
DN
ΤI
     Chemical compounds 635: pyridopyrimidinediones as PDE4 inhibitors and
     their preparation, pharmaceutical compositions and use in the treatment of
     PDE4-mediated diseases
     Bonnert, Roger Victor; Humphries, Theresa; Hunt, Simon Fraser; Sanganee,
ΙN
     Hitesh Jayantilal
PA
     Astrazeneca AB, Swed.; Astrazeneca UK Limited
SO
     PCT Int. Appl., 93pp.
     CODEN: PIXXD2
     Patent
DT
     English
LA
FAN.CNT 1
     PATENT NO.
                           KIND DATE APPLICATION NO.
                                                                             DATE
                            ____
                                     20080717 WO 2008-GB81
     WO 2008084236
                             A1
                                                                              20080110
PΤ
          W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
               CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
               FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
               KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
               ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
          ME, MG, MK, MN, MW, MX, MI, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BV, KG, KZ, MD, BU, TI, TM
               AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                         P 20070111
PRAI US 2007-884453P
                THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
L18 ANSWER 7 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
     2008:829624 CAPLUS
ΑN
     149:153108
DN
     Preparation of pyrazolopyrimidine derivatives as Syk and Abl inhibitors
TΙ
     for treatment of allergic diseases, autoimmune diseases, etc.
IN
     Yaqi, Makoto; Umemiya, Hiroki; Asanuma, Hajime; Oka, Yusuke; Nishikawa,
     Rie; Hayashi, Keishi; Okada, Takumi; Shimizu, Takanori; Sasako, Shigetada
     Taisho Pharmaceutical Co., Ltd., Japan; Nissan Chemical Industries, Ltd.
PA
SO
     PCT Int. Appl., 103pp.
     CODEN: PIXXD2
DT
     Patent
T.A
     Japanese
FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                            KIND
                                     DATE
                             ____
                            A1 20080710 WO 2007-JP75278 20071228
     WO 2008081928
PΙ
          W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
               CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
               FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
          BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
               GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
               BY, KG, KZ, MD, RU, TJ, TM
PRAI JP 2006-353781
                        A
                                     20061228
                THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 12
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L18 ANSWER 8 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
AN
     2008:769987 CAPLUS
DN
     149:105955
     (Meth)acrylic resin composition and films thereof
TΙ
IN
     Takamatsu, Yorinobu; Abe, Hidetoshi; Toriumi, Naoyuki; Kashihara,
     Yoshihiro
PΑ
     3M Innovative Properties Company, USA
     PCT Int. Appl., 33pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                          KIND DATE
     PATENT NO.
                                               APPLICATION NO.
                          ----
                                                _____
     WO 2008076101
                           A1 20080626 WO 2006-US48019
                                                                         20061218
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
              KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
              MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
         RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, MCC, MZ, MD, BH, TT, TM
              KG, KZ, MD, RU, TJ, TM
PRAI WO 2006-US48019
                                  20061218
RE.CNT 1
               THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
L18 ANSWER 9 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
     2008:769501 CAPLUS
ΑN
     149:80444
DN
ΤI
     Hindered amino group-containing silanol compounds and aqueous solutions
     containing their condensates
     Honma, Takayuki; Kubota, Toru; Kiyomori, Ayumi
IN
     Shin-Etsu Chemical Industry Co., Ltd., Japan
PA
     Jpn. Kokai Tokkyo Koho, 10pp.
     CODEN: JKXXAF
DT
     Patent
LA
    Japanese
FAN.CNT 1
     PATENT NO.
                          KIND
                                   DATE
                                               APPLICATION NO. DATE
                           ____
                                   _____
                                                ______
                                               JP 2006-334000 20061212
     JP 2008143852
                           Α
                                 20080626
PRAI JP 2006-334000
                                   20061212
L18 ANSWER 10 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
ΑN
     2008:685908 CAPLUS
DN
     149:152918
ΤI
     One-Pot Synthesis of Functionalized Piperid-4-ones: A Four-Component
     Condensation
     Clarke, Paul A.; Zaytsev, Andrey V.; Morgan, Tyson W.; Whitwood, Adrian
ΑU
     C.; Wilson, Claire
     Department of Chemistry, University of York, Heslington, York, North
CS
     Yorks, YO10 5DD, UK
     Organic Letters (2008), 10(13), 2877-2880
SO
     CODEN: ORLEF7; ISSN: 1523-7060
     American Chemical Society
PB
DT
     Journal
```

LA English

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d L18 61-65

- L18 ANSWER 61 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:1293152 CAPLUS
- DN 148:144610
- TI $\beta\textsc{-Amino}$ Acids to Piperidinones by Petasis Methylenation and Acid-Induced Cyclization
- AU Adriaenssens, Louis V.; Hartley, Richard C.
- CS WestCHEM Department of Chemistry, University of Glasgow, Glasgow, G12 8QQ, UK
- SO Journal of Organic Chemistry (2007), 72(26), 10287-10290 CODEN: JOCEAH; ISSN: 0022-3263
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 148:144610
- RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 62 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:1293046 CAPLUS
- DN 148:144917
- TI Synthesis and Pharmacological Evaluation of Fluorescent and Photoactivatable Analogues of Antiplasmodial Naphthylisoquinolines
- AU Bringmann, Gerhard; Gampe, Christian M.; Reichert, Yanina; Bruhn, Torsten; Faber, Johan H.; Mikyna, Martin; Reichert, Matthias; Leippe, Matthias; Brun, Reto; Gelhaus, Christoph
- CS Institute of Organic Chemistry, University of Wuerzburg, Wuerzburg, D-97074, Germany
- SO Journal of Medicinal Chemistry (2007), 50(24), 6104-6115 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 148:144917
- RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 63 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:1252413 CAPLUS
- DN 148:78940
- TI A simple and efficient synthesis of new cyclic ureas
- AU Baumann, Delphine; Bennis, Khalil; Ripoche, Isabelle; Troin, Yves
- CS Laboratoire de Chimie des Heterocycles et des Glucides, EA 987, Ecole Nationale Superieure de Chimie de Clermont-Ferrand, Universite Blaise Pascal, Aubiere, 63174, Fr.
- SO Tetrahedron Letters (2007), 48(47), 8363-8365 CODEN: TELEAY; ISSN: 0040-4039
- PB Elsevier Ltd.
- DT Journal
- LA English
- OS CASREACT 148:78940
- RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 64 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:1221539 CAPLUS

- DN 148:79253
- TI First total synthesis of (+)-adenophorine, a naturally occurring inhibitor of glycosidases
- AU Pearson, Morwenna S. M.; Evain, Al Michel; Mathe-Allainmat, Monique; Lebreton, Jacques
- CS Universite de Nantes, CNRS, Nantes, 44322, Fr.
- SO European Journal of Organic Chemistry (2007), (29), 4888-4894 CODEN: EJOCFK; ISSN: 1434-193X
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- OS CASREACT 148:79253
- RE.CNT 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 65 OF 77 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2007:1195238 CAPLUS
- DN 148:27653
- TI Cryptadines A and B, novel C27N3-type pentacyclic alkaloids from Lycopodium cryptomerinum
- AU Koyama, Koichiro; Hirasawa, Yusuke; Kobayashi, Jun'ichi; Morita, Hiroshi
- CS Faculty of Pharmaceutical Sciences, Hoshi University, Tokyo, 142-8501, Japan
- SO Bioorganic & Medicinal Chemistry (2007), 15(24), 7803-7808 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier Ltd.
- DT Journal
- LA English
- RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

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	ENTRY	SESSION
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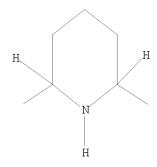
http://www.cas.org/support/stngen/stndoc/properties.html

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L20 STRUCTURE UPLOADED

=> d 120 L20 HAS NO ANSWERS L20 STR



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17 ANSWERS

=> s 120 sss sam SAMPLE SEARCH INITIATED 14:00:13 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 18600 TO ITERATE

10.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 363833 TO 380167

PROJECTED ANSWERS: 2408 TO 3916

L21 17 SEA SSS SAM L20

=> s 120 sss full FULL SEARCH INITIATED 14:00:27 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 372862 TO ITERATE

100.0% PROCESSED 372862 ITERATIONS 3346 ANSWERS SEARCH TIME: 00.00.04

L22 3346 SEA SSS FUL L20

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FILE COVERS 1907 - 18 Aug 2008 VOL 149 ISS 8 FILE LAST UPDATED: 17 Aug 2008 (20080817/ED)

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http://www.cas.org/legal/infopolicy.html

ORIGINAL REFERENCE NO.: 121:14913a,14916a

TITLE:

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=> s L22
L23
          2516 L22
=> s (cancer OR "Cancer (genus)") OR (angiogenesis OR "Angiogenesis")
        370638 CANCER
         54465 CANCERS
        384282 CANCER
                 (CANCER OR CANCERS)
        370638 "CANCER"
         54465 "CANCERS"
        384282 "CANCER"
                 ("CANCER" OR "CANCERS")
         53989 "GENUS"
           103 "GENUSES"
         18740 "GENERA"
            8 "GENERAS"
         68072 "GENUS"
                 ("GENUS" OR "GENUSES" OR "GENERA" OR "GENERAS")
            48 "CANCER (GENUS)"
                 ("CANCER"(W) "GENUS")
         46826 ANGIOGENESIS
         46826 "ANGIOGENESIS"
L24
        416294 (CANCER OR "CANCER (GENUS)") OR (ANGIOGENESIS OR "ANGIOGENESIS")
=> s L23 AND L24
            55 L23 AND L24
=> d L25 50 ibib
L25 ANSWER 50 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                         1994:483015 CAPLUS
DOCUMENT NUMBER:
                         121:83015
```

Dibenzo[a,f]quinolizines: syntheses and cytostatic

activity in estrogen-sensitive tumor cells

AUTHOR(S): von Angerer, Silvia; Seidl, Engelbert; Mannschreck,

Albrecht; von Angerer, Erwin; Wiegrebe, Wolfgang

CORPORATE SOURCE: Inst. Pharm., Univ. Regensburg, Regensburg, D-93040,

Germany

SOURCE: Anti-Cancer Drug Design (1994), 9(1), 25-40

CODEN: ACDDEA; ISSN: 0266-9536

DOCUMENT TYPE: Journal LANGUAGE: English

=> d L25 30-50 ibib abs hitstr

L25 ANSWER 30 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:71602 CAPLUS

DOCUMENT NUMBER: 142:316675

TITLE: Optimization of 6,7-Disubstituted-4-

(arylamino)quinoline-3-carbonitriles as Orally Active,

Irreversible Inhibitors of Human Epidermal Growth

Factor Receptor-2 Kinase Activity

AUTHOR(S): Tsou, Hwei-Ru; Overbeek-Klumpers, Elsebe G.; Hallett,

William A.; Reich, Marvin F.; Floyd, M. Brawner; Johnson, Bernard D.; Michalak, Ronald S.; Nilakantan,

Ramaswamy; Discafani, Carolyn; Golas, Jonathan;

Rabindran, Sridhar K.; Shen, Ru; Shi, Xiaoqing; Wang,

Yu-Fen; Upeslacis, Janis; Wissner, Allan

CORPORATE SOURCE: Chemical and Screening Sciences, Chemical Development,

and Oncology, Wyeth Research, Pearl River, NY, 10965,

USA

SOURCE: Journal of Medicinal Chemistry (2005), 48(4),

1107-1131

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:316675

GΙ

$$R^{1}$$
 R^{2}
 R^{1}
 R^{2}
 R^{2}
 R^{3}
 R^{2}
 R^{2}
 R^{3}
 R^{4}

AB A series of new 6,7-disubstituted-4-(arylamino)quinoline-3-carbonitriles, e.g. I (R1 = H, C1; R2 = PhCH2O, 1-imidazolyl, 2-furylmethoxy, etc.; R3 = C1, CN, PhCH2O; R4 = Me, Et; R5 = Me, R6 = Me, HOCH2CH2; R5R6N = azetidinyl, piperidinyl, thiomorpholinyl, etc.) that function as irreversible inhibitors of human epidermal growth factor receptor-2

Ι

(HER-2) and epidermal growth factor receptor (EGFR) kinases have been prepared These compds. demonstrated enhanced activities for inhibiting HER-2 kinase and the growth of HER-2 pos. cells compared to the EGFR kinase inhibitor I [R1 = H; R2 = F; R3 = C1; R4 = Et; R5 = R6 = Me;(EKB-569)]. Three synthetic routes were used to prepare these compds. Thev were prepared mostly by acylation of 6-amino-4-(arylamino)quinoline-3carbonitriles with unsatd. acid chlorides or by amination of 4-chloro-6-(crotonamido)quinoline-3-carbonitriles with monocyclic or bicyclic anilines. The third route was developed to prepare a key intermediate, 6-acetamido-4-chloroquinoline-3-carbonitrile, that involved a safer cyclization step. It was shown that attaching a large lipophilic group at the para position of the 4-(arylamino) ring results in improved potency for inhibiting HER-2 kinase. The importance of a basic dialkylamino group at the end of the Michael acceptor for activity, due to intramol. catalysis of the Michael addition has also been demonstrated. This, along with improved water solubility, resulted in compds. with enhanced biol. properties. The mol. modeling results consistent with the proposed mechanism of inhibition are presented. Binding studies of one compound, I [R1 = H; R2 = 2-pyridylmethoxy; R3 = C1; R4 = Et; R5 = R6 = Me; (HKI-272)](C-14 radiolabeled), showed that it binds irreversibly to HER-2 protein in BT474 cells. Furthermore, it demonstrated excellent oral activity, especially in HER-2 overexpressing xenografts. Compound HKI-272 was selected for further studies and is currently in phase I clin. trials for the treatment of cancer.

ΙT 766-17-6, cis-2,6-Dimethylpiperidine

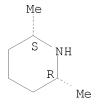
RL: RCT (Reactant); RACT (Reactant or reagent)

(N-alkylation; preparation of disubstituted (arylamino)quinolinecarbonitrile s as orally active, irreversible inhibitors of human epidermal growth factor receptor-2 kinase activity and antitumor agents)

766-17-6 CAPLUS RN

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 31 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

2004:740319 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:260543

TITLE: Preparation of hydroxycoumaranone derivatives as uPA

receptor antagonists for treatment of cancers

Bauer, Sabine; Endele, Richard; Fertig, Georg; Friebe, INVENTOR(S):

Walter-Gunar; Koerner, Matthias; Krell, Hans-Willi

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.

PCT Int. Appl., 55 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2004076444
                          A 2
                                20040910
                                            WO 2004-EP1798
                                                                    20040224
     WO 2004076444
                          Α3
                                20041028
            AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
             BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR,
             CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
             ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
             IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC,
             LK, LR, LS, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MX,
             MZ, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
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             GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                            EP 2003-3299
                                                                A 20030225
OTHER SOURCE(S):
                         MARPAT 141:260543
GΙ
```

$$O$$
 O
 A
 B
 M
 R^3
 I
 D_3C
 D_3C
 $NH-CO$
 $C1$
 II

AB Title compds. represented by the formula I [wherein W = C:CR1(R2) or CHR1(R2); R1, R2 = independently H, (cyclo)alkyl, aminoalkyl, thioalkyl, (CH2)nOalkyl, or R1R2 = cycloalkyl; A = alkylene, (CH2)nCO, (CH2)nCONH; B = heterocyclic group; M = NHCO, NHCH2; R3, R4 = independently H, halo, CN, NH2, etc.; n = 1-4; and pharmaceutically acceptable salts thereof] were prepared as uPA receptor antagonists. For example, reaction of $4-(4-bromopentoxy)-2-(1',1',1',3',3',3'-hexadeuteroisopropylidene)benzofur an-3-one with 3,4-dichloro-N-piperidin-4-ylbenzamide gave II in 31% yield. II showed inhibition of uPA receptor with IC50 value of 0.08 <math display="inline">\mu$ M. Thus, I and their pharmaceutical compns. are useful as uPA receptor antagonists for the control or prevention of corresponding illnesses and disorders; or in the manufacture of corresponding medicaments for the inhibition of tumor growth (no data).

IT 753013-86-4P

RN

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of hydroxycoumaranone derivs. as uPA receptor antagonists for treatment of cancers)

753013-86-4 CAPLUS

L25 ANSWER 32 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:718513 CAPLUS

DOCUMENT NUMBER: 141:225770

TITLE: Preparation of of aza-sugar derivatives as anticancer

agents

INVENTOR(S): Arora, Jasbir Singh; Gupta, Nidhi; Salman, Mohammad;

Gupta, Jang Bahadur; Pandit, Upendra Kumar

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL					D.	ATE	
WC	2004	 0742	 51		 A1	_	2004	0902							2	0030	220
							AU,										
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
							MD,										
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
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		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	
AU	2003	2060	21		A1		2004	0909		AU 2	003-	2060:	21		2	0030	220
EP	1597	231			A1		2005	1123		EP 2	003-	7029	04		2	0030	220
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
US	2006	0241	114		A1		2006	1026		US 2	005-	5464	62		2	0050	819
IN	2005	DN 04	194		Α		2007	1207		IN 2	005-	DN41	94		2	0050	916
PRIORIT	Y APP	LN.	INFO	.:						WO 2	003-	IB61:	9		A 2	0030	220
OTHER S	OURCE	(S):			CAS	REAC	T 14	1:22	5770	; MA	RPAT	141	:225	770			
GI																	

AB Certain derivs. of aza-sugars I, wherein A is H, alkyl, alkenyl, alkynyl;

X-G is CO, CH2; R is H, alkyl, acyl, aryl, aralkyl, trimethylsilyl; Y is O, NH, heterocycle; P is alkyl, CF3, aryl, aralkyl, alkylamino, heterocycle, useful in the treatment of cancer, are presented. This invention also relates to pharmacol. compns. containing the compds. of present invention and treatment of cancer, including tumor or other neoplasm, with an aza-sugar. Thus, 2,3,4-tri-O-benzyl-6-O-(4,6-dichloro-1,3,5-triazin-1-yl)-N-propyl-D-gluco-6-lactam was prepared and tested in vitro as antitumor agent.

IT 748814-76-8P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of of azasugar derivs. as anticancer agents)

RN 748814-76-8 CAPLUS

CN 2-Piperidineacetamide, N-[[(2R,3R,4S,5R)-6-oxo-3,4,5-tris(phenylmethoxy)-1-propyl-2-piperidinyl]methyl]-3,4,5-tris(phenylmethoxy)-6-[(phenylmethoxy)methyl]-, (3S,4R,5R,6R)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 33 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel

angiogenesis inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	.00		D.	ATE	
WO 2003				A2 A3		2003 2003			WO 2	003-	US21	05		2	0030	124
	ΑE,	AG,	•	AM,	AT,	AU, DK,	AZ,	•	•	•	•	•	•	•	•	•
	GM,	HR,	HU,	ID,	IL,	IN, MD,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,

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PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
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             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
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     US 20050038071
                          Α1
                                20050217
                                            US 2004-502080
                                                                    20041008
PRIORITY APPLN. INFO.:
                                                                P 20020125
                                            US 2002-351880P
                                            WO 2003-US2105
                                                                W 20030124
OTHER SOURCE(S):
                         MARPAT 139:149804
GT
```

$$R^{1}$$
 R^{2}
 R^{2}
 R^{1}
 R^{2}
 R^{2}

AB The present invention relates to solenopsin A and its analogs, I [R1, R2 = linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (±)-Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et2O followed by addition of ClCO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et20 and treatment with HCl(q). The anticancer activity of I·HCl [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth inhibition at 1, 3 and 6 μ g/mL). 32778-77-1DP, Solenopsin B, analogs 63950-17-4P, ΙT (±)-Solenopsin A hydrochloride 175478-17-8P 409060-79-3P 409060-81-7P 409060-82-8P 409060-83-9P 409060-85-1P 409060-86-2P 409060-87-3P 409060-88-4P 409060-89-5P 409060-90-8P 409060-91-9P 409060-92-0P 409061-00-3P 409061-29-6P 409061-33-2P 409061-34-3P 571186-34-0P RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of solenopsin A, B and analogs as novel angiogenesis inhibitors) RN 32778-77-1 CAPLUS Piperidine, 2-methyl-6-tridecyl-, (2R,6R)- (CA INDEX NAME)

Absolute stereochemistry.

Me
$$\stackrel{\text{H}}{\text{N}}$$
 $\stackrel{\text{(CH2)}}{\text{12}}$ $\stackrel{\text{Me}}{\text{Me}}$

RN 63950-17-4 CAPLUS CN Piperidine, 2-methyl-6-undecyl-, hydrochloride, (2R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 175478-17-8 CAPLUS
CN Piperidine, 2-methyl-6-propyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS
CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-81-7 CAPLUS
CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS
CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-83-9 CAPLUS CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS
CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-90-8 CAPLUS CN 2-Piperidinepropanoic acid, 6-methyl-, ethyl ester, hydrochloride (1:1), (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-91-9 CAPLUS
CN 2-Propenoic acid, 3-[(2R,6S)-6-methyl-2-piperidinyl]-, ethyl ester, hydrochloride (1:1), rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409061-00-3 CAPLUS CN Piperidine, 2-methyl-6-pentyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME) Relative stereochemistry.

● HCl

RN 409061-29-6 CAPLUS
CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS
CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

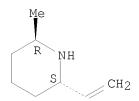
RN 409061-34-3 CAPLUS CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 571186-34-0 CAPLUS

CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



● HCl

L25 ANSWER 34 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:500243 CAPLUS

DOCUMENT NUMBER: 139:246133

TITLE: Enantioselective synthesis of clavepictine analogues

and evaluation of their cytotoxic activity

AUTHOR(S): Agami, Claude; Couty, Francois; Evano, Gwilherm;

Darro, Francis; Kiss, Robert

CORPORATE SOURCE: Laboratoire de Synthese Asymetrique, UMR 7611,

Universite Pierre et Marie Curie, Paris, 75005, Fr.

SOURCE: European Journal of Organic Chemistry (2003), (11),

2062-2070

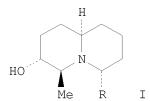
CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:246133

GΙ



AB Six analogs I of a cytotoxic alkaloid isolated from the tunicate Clavelina picta were synthesized from an acyl oxazolidine. The absolute stereochem. of the targeted analogs derived from (R)-Ph glycinol and the relative stereochemistries of three of the four stereocenters present in the mol. were set up by stereocontrolled addns. to transient iminium ions. The main features of this synthesis include (i) a high level of stereocontrol for all the steps involving the arrangement of relative stereochemistries, (ii) a divergent introduction of the side chain at the end of the synthesis, allowing the easy preparation of the different analogs, and (iii) an original step involving an intramol. alkylation of an aminonitrile moiety that enabled the efficient construction of the quinolizidine core to take place. Together with the cytotoxic activities of the six analogs, those of three reference compds. (etoposide, adriamycin and irinothecan) were determined

by means of the colorimetric MTT assay on four human-cancer cell lines. Compound I (R = decyl) had a cytotoxic effect on the four human-cancer cell lines in dose ranges similar to etoposide and irinothecan. Compound I (R = dec-1-enyl) also had a significant cytotoxic effect on all four of the human-cancer cell lines under study, but these activities were weaker than those induced by I (R = decyl). Compound I (R = dec-3-en-1-ynyl) had a significant cytotoxic effect on three of the four human-cancer cell lines, and compds. I (R = ethynyl, phenylethynyl, cyanomethyl) had no cytotoxic effect (except compound I (R = ethynyl) with respect to the A549 model at the highest dose) on the four human models under study.

IT 600143-39-3P

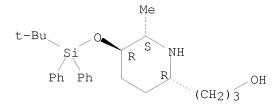
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(asym. synthesis and cytotoxic activity of clavepictine analogs)

RN 600143-39-3 CAPLUS

CN 2-Piperidinepropanol, 5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-6-methyl-, (2R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 35 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:42245 CAPLUS

DOCUMENT NUMBER: 138:106689

TITLE: Preparation of thiazolylamino benzamide derivatives as

modulators of cell proliferation and inhibitors of

protein kinases

INVENTOR(S): Chu, Shao Song; Alegria, Larry Andrew; Bleckman, Ted

Michael; Chong, Wesley K. M.; Duvadie, Rohit K.; Li,

Lin; Reich, Siegfried H.; Romines, William H.;

Wallace, Michael B.; Yang, Yi

PATENT ASSIGNEE(S): Agouron Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 163 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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· ·	JΡ	2005	5216.	31		${ m T}$		2005	0721		JP 2	003-	5106.	35		2	0020	705
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											WO 2	002-	JS21.	280	1	W 2	0020	705
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OTHER SOURCE(S): MARPAT 138:106689

GΙ

Aminothiazole compds. with mono-/di-substituted benzamides (shown as I; AB variables described below; e.g. 4-[[4-amino-5-(2,6-difluorobenzoyl)thiazol-2-yl]amino]-N-(2-morpholin-4-ylethyl)benzamide), and their pharmaceutically acceptable salts, pharmaceutically acceptable prodrugs, pharmaceutically active metabolites, and pharmaceutically acceptable salts of said metabolites are described. These agents modulate and/or inhibit the cell proliferation and activity of protein kinases and are useful as pharmaceuticals for treating malignancies and other disorders. Inhibitory activities towards three cyclin complexes of protein kinases, phosphorylated FGF receptor and/or LCK tyrosine kinase and/or cytotoxicity towards the HCT-116 cancer cell line are reported for hundreds of I, many of which were prepared combinatorially. For I: R1 and R2 are each independently H, or an alkyl, alkenyl, alkynyl, heteroalkyl, alkoxy, aminoalkyl, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group unsubstituted or substituted with ≥ 1 substituents listed in the claims, or R1 or R2, together with the N-C(0) and two adjacent C atoms of the Ph ring of I, forms a 5- or 6-membered ring structure fused to the Ph ring of I and unsubstituted or substituted with ≥ 1 substituents

listed in the claims, or R1 and R2, taken together with the N atom to which they are bonded, form a monocyclic or fused or nonfused polycyclic structure which may contain 1-3 addnl. heteroatoms, the structure being unsubstituted or substituted with ≥ 1 substituents listed in the claims. R3 is an aryl, heteroaryl, alkyl, or cycloalkyl group, unsubstituted or substituted with ≥1 substituents listed in the claims. Y is H, alkyl, heteroalkyl, haloalkyl, halocycloalkyl, haloheterocycloalkyl, cycloalkyl, heterocycloalkyl, -NO2, -NH2, -N-OH, N-ORC, -CN, -(CH2)z-CN (z is 0-4), halogen, -OH, -O-Ra-O-, -ORb, -CO-R, -O-CO-Rc, -CO-ORc, -O-CO-OR, -O-OR, =O, =S, -NRdRe, -CO-NRdRe, -O-CO-NRdRe, -NRc-CO-Re, -NR-CO-OR, -CO-NRc-CO-Rd, -O-SO2-Re, -O-SO-R, -O-S-Re, -S-CO-Rc, -SO-CO-ORc, -SO-CO-OR, -O-SO3, -NRc-SRd, -NRc-SO-Rd, NRc-SO2-Rd, -CO-SRc, -CO-SO-Re, -CO-OSO2-Rc, -CS-Rc, -CSO-R, -CSO2-R,, -NRc-CS-Rd, -O-CS-Re, -O-CSO-Rc, -O-S02-Re, -OS2-NRdRe, -SO-NRdRe, -S-NRdRe, -NRd-CSO2-Rd, - NRc-CSO-Rd, -NRc-CS-Rd, -SH, -S-Rb, and -PO2-ORc (Ra, etc. defined in claims). Although the methods of preparation are not claimed, .apprx.80 example prepns. of I are included and directions are given for combinatorial preparation of 396 I.

IT 766-17-6, cis-2,6-Dimethylpiperidine

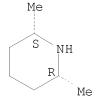
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of thiazolylamino benzamide derivs. as modulators of cell proliferation and inhibitors of protein kinases)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



L25 ANSWER 36 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:965133 CAPLUS

DOCUMENT NUMBER: 138:39277

TITLE: Preparation of N-thiazolyl-N'-pyridyl ureas as

antitumor agents

INVENTOR(S): Askew, Benny C.; De Morin, Frenel F.; Hague, Andrew;

Laber, Ellen; Li, Aiwen; Liu, Gang; Lopez, Patricia; Nomak, Rana; Santora, Vincent; Tegley, Christopher;

Yang, Kevin

PATENT ASSIGNEE(S): Amgen, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 129 pp., Cont.-in-part of U.S.

Ser. No. 930,753.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020193405	A1	20021219	US 2002-77124	20020215
US 6645990	В2	20031111		
US 20020173507	A1	20021121	US 2001-930753	20010814
EP 1619184	A2	20060125	EP 2005-15480	20010815
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                                            EP 2001-964009
                                                               A 20020215
                                            US 2002-77124
                                            WO 2003-US4537
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                        MARPAT 138:39277
OTHER SOURCE(S):
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GΙ

CN

The title compds. [I; R15 = H, heterocyclyl, Ph, etc.; R16 = H, AB heterocyclylcarbonyl, alkylaminocarbonyl, etc.; R17 = halo, alkyl, cycloalkyl, etc.; provided only one of R15 and R16 = H] which are effective for prophylaxis and treatment of diseases, such as cell proliferation or apoptosis mediated diseases involving stroke, cancer and the like, were prepared Thus, heating 2-phenyl-4-thiazolylcarbonylazide with 6-(3-methylpiperidin-1ylmethyl)pyridin-2-ylamine in PhMe afforded the urea I [R15 = 3-methylpiperidin-1-ylmethyl; R16 = H; R17 = Ph] which showed cdk2/cyclin and cdk5/p25 kinase activity with IC50 of < 0.5 μM . 504-03-0, 2,6-Dimethylpiperidine ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of N-thiazolyl-N'-pyridyl ureas as antitumor agents) RN 504-03-0 CAPLUS

Ι

Piperidine, 2,6-dimethyl- (CA INDEX NAME)



L25 ANSWER 37 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:428894 CAPLUS

DOCUMENT NUMBER: 137:20303

TITLE: Preparation of substituted quinolines as antitumor

agents

INVENTOR(S): Boyle, Francis Thomas; Gibson, Keith Hopkinson; Foote,

Kevin Michael

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

GΙ

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OTHER	SC	URCE	(S):			MAR	PAT	137:	20303	3									

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [n = 0 or 1; Y = NH, O, S, or alkylamine; R5 = CN, F, Cl, or Br; R6 = (un)substituted -cycloalkyl, -pyridinyl, -pyrimidinyl, -Ph, etc.; R1, R2 and R4 independently = H, OH, halo, CN, NO2, F3C, alkyl,

amine, alkylamine, dialkylamine, R7X1(CH2)x- wherein x = 0-3, R7 = H, (un) substituted hydrocarbyl or heterocyclyl and X1 = O, CH2, OCO, CO, S, SO, SO2, NR8CO, NR8CO2, CONR9, CO2NR9, SO2NR10, NR11 or NR11NR11 wherein R8, R9, R10 and R11 independently = H, alkyl or alkoxyalkyl; R3 = group of formula X1R12(OH)p where p = 1-2 and R12 = alkylene, alkenylene or alkynylene chain, optionally interposed with a heteroatom or heterocyclic ring with the provision that when R12 = alkylene, R12 must be interposed with a heteroatom or heterocyclic ring and at least one (OH)p is on the alkylene chain between X1 and the interposed heteroatom or heterocyclic ring; group of formula R7(CH2)yX1(CH2)x where y = 0-5 and (CH2)y is optionally interposed by an X1 group; group of formula X1alkyl where alkyl is substituted by one or more Cl and/or CN; heterocyclic ring, etc.], or a pharmaceutically acceptable salt, pro-drug or solvate thereof are prepared and disclosed as antiproliferative agents. Thus, II was prepared in eight steps from benzylchloroformate and 2-methoxy-5-nitroaniline. I were evaluated as inhibitors of MAPK pathway and exhibited IC50 values typically lest than 0.5 μM , e.g., II possessed an IC50 = 0.0013 μM . In cell proliferation assays, I had IC50 results typically less than $30\mu\text{M}$ with II giving an IC50 of 1.3 μM in HT29 human colon tumor cells. Methods for prevention of cancer comprising administering an effective amount of compound I are further claimed.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation, inhibition of MAP kinase, and cellular antiproliferation activity of substituted quinolines as antitumor agents)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 38 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:391711 CAPLUS

DOCUMENT NUMBER: 136:401914

TITLE: Preparation of saframycin analogs for pharmaceutical

use in the treatment of cancer

INVENTOR(S): Myers, Andrew; Plowright, Alleyn T.; Kung, Daniel W.;

Lanman, Brian; Barbay, Joseph; Xing, Chengguo President and Fellows of Harvard College, USA

PATENT ASSIGNEE(S): President and Fellows of SOURCE: PCT Int. Appl., 203 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
WO 2002	0404	 77		A2	_	 2002	n523		 WO 2		 [[\$47			2	0011	 105
	-								WO Z	001-	0547.	399			0011.	103
WO 2002	0404	/ /		АЗ		2003	022/									
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                           Α
                                 20020527
                                             AU 2002-39565
                                                                      20011105
     US 20030008873
                           A1
                                 20030109
                                             US 2001-11466
                                                                      20011105
     US 6809099
                           В2
                                 20041026
     EP 1339713
                           Α2
                                 20030903
                                             EP 2001-987338
                                                                      20011105
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004529074
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                                 20040924
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     US 7122549
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                                 20061017
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                           Α1
                                 20070517
                                             US 2006-582526
                                                                     20061017
PRIORITY APPLN. INFO.:
                                             US 2000-245888P
                                                                  Р
                                                                     20001103
                                             US 2001-11466
                                                                  A3 20011105
                                             WO 2001-US47399
                                                                  W 20011105
                                             US 2004-826859
                                                                  A3 20040416
OTHER SOURCE(S):
                         MARPAT 136:401914
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GΙ

AB Saframycin analogs, such as I [R = H, alkyl, acyl, arylacyl, heteroarylacyl, carboxy, arylsulfonyl, etc.], were prepared for therapeutic use as antitumor agents. Thus, I <math>(R = 2-furanylmethyl) was prepared in 95% yield via condensation of 2-furancarboxaldehyde with the corresponding amine I (R = NH2) using sodium triacetoxyborohydride in MeCN. The amine I (R = H) was prepared via a stereoselective sequence of solid phase synthetic steps. The prepared saframycin analogs were assayed for cancer cell growth inhibition of A375 malignant melanoma and A-459 lung carcinoma cell lines.

Ι

IT 253329-77-0P 429687-59-2DP, polymer bound 429687-59-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of saframycin analogs for pharmaceutical use in the treatment of cancer)

RN 253329-77-0 CAPLUS

CN Carbamic acid, [(1S)-1-[(1R,3S)-3-[(R)-cyano-4-morpholinylmethyl]-1,2,3,4-tetrahydro-8-hydroxy-5,7-dimethoxy-6-methyl-1-isoquinolinyl]-2-[5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,4-dimethoxy-3-methylphenyl]ethyl]-,9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 429687-59-2 CAPLUS

CN Carbamic acid, [(1S)-1-[(1R,3S)-3-[(S)-cyano[(2S)-2-(4-hydroxybutyl)-4-morpholinyl]methyl]-1,2,3,4-tetrahydro-8-hydroxy-5,7-dimethoxy-6-methyl-1-isoquinolinyl]-2-[5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,4-dimethoxy-3-methylphenyl]ethyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 429687-59-2 CAPLUS

CN Carbamic acid, [(1S)-1-[(1R,3S)-3-[(S)-cyano[(2S)-2-(4-hydroxybutyl)-4-morpholinyl]methyl]-1,2,3,4-tetrahydro-8-hydroxy-5,7-dimethoxy-6-methyl-1-

isoquinolinyl]-2-[5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,4-dimethoxy-3-methylphenyl]ethyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L25 ANSWER 39 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:228866 CAPLUS

DOCUMENT NUMBER: 134:266317

TITLE: Preparation of quinazolines as aurora 2 kinase

inhibitors

INVENTOR(S): Mortlock, Andrew Austen; Keen, Nicholas John; Jung,

Frederic Henri; Brewster, Andrew George

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 306 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT N	4O.			KIN	D	DATE					ION :			D	ATE	
WO 20010)215	 96		A1	_	2001	 0329							2	0000	 918
W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	PL,	PT,	RO,	RU,
	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
	YU,	ZA,	ZW													
RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
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	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
CA 23842	291			A1		2001	0329	1	CA 2	000-	2384	291		2	0000	918
BR 20000	141	16		Α		2002	0521		BR 2	000-	1411	6		2	0000	918
EP 12183	354			A1		2002	0703		EP 2	000-	9608	40		2	0000	918
R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							

JP 2003509499	T	20030311	JΡ	2001-524975		20000918
EE 200200119	Α	20030415	EE	2002-119		20000918
HU 2003000059	A2	20030728	HU	2003-59		20000918
HU 2003000059	A3	20030828				
BG 106492	А	20030131	ВG	2002-106492		20020307
IN 2002MN00293	Α	20050318	IN	2002-MN293		20020308
ZA 2002002234	А	20030619	ZA	2002-2234		20020319
NO 2002001399	А	20020430	ИО	2002-1399		20020320
PRIORITY APPLN. INFO.:			GB	1999-22154	A	19990921
			GB	1999-22170	A	19990921
			WO	2000-GB3580	W	20000918
			WO	2000-GB9100	A	20000918

Ι

OTHER SOURCE(S): MARPAT 134:266317

$$\begin{array}{c|c}
R7 \\
\hline
R1 \\
R2 \\
R3 \\
R4
\end{array}$$

$$\begin{array}{c|c}
R7 \\
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R8 \\
R8 \\
R6
\end{array}$$

AΒ Title compds. (I) [wherein X = O, S, SO, SO2, NH, or NR12; R12 = H or alkyl; R1-R4 = independently halo, CN, NO2, alkylsulfanyl, N(OH)R13, or R15X1; R13 = H or alkyl; X1 = a direct bond, O, CH2, OC(O), CO, CO2, S, SO, SO2, or (un) substituted NHCO, CONH, SO2NH, NHSO2, or NH; R15 = H or (un) substituted hydrocarbyl, heterocyclyl, or alkoxy; R5 = NHCO2R9, NHCOR9, NHSO2R9, COR9, CO2R9, SOR9, SO2OR9, CONR10R11, SONR10R11, or SO2NR10R11; R9-R11 = independently H or (un)substituted hydrocarbyl or heterocyclyl; or R10 and R11 together with the N to which they are attached = (un)substituted heterocyclyl; R6 = H or (un)substituted hydrocarbyl or heterocyclyl; R7 and R8 = independently H, halo, alkyl, (di)alkoxy(methyl), alkanoyl, CF3, CN, NHY2, alkenyl, alkynyl, or (un)substituted Ph, PhCH2, or heterocyclyl; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, a 7-step sequence involving (1) alkylation of morpholine with 1-bromo-3chloropropane (49%), (2) addition of Et vanillate to yield Et 3-methoxy-4-(3-morpholinopropoxy)benzoate (100%), (3) nitration (86%), (4) reduction to the amine using 10% Pd/C (100%), (5) cycloaddn. with formamide to form the quinazoline(68%), (6) chlorination to give 4-chloro-6-methoxy-7-

ΙI

(3-morpholinopropoxy) quinazoline (60%), and (7) amination with N-benzoyl-4-aminoaniline (58%) yielded II. The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration

of

0.0193 $\mu\text{M}.$ In addition, II gave 50% inhibition of MCF-7 cell proliferation at 1.06 μM and reduced BrdU incorporation into cellular DNA by 50% at 0.159-0.209 $\mu\text{M}.$

IT 504-03-0, 2,6-Dimethyl-piperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 40 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:608722 CAPLUS

DOCUMENT NUMBER: 133:193079

TITLE: Preparation of arylsulfonylheterocyclylhydroxamic

acids and related compounds as matrix metalloprotease

inhibitors

INVENTOR(S): Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.;

Boehm, Terri L.; Carroll, Jeffery N.; De Crescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Hanson, Gunnar J.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Steve A.; Li, Hui; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier,

William F.; Villamil, Clara I.; Rao, Shashidahar N.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 851 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PAT	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
WO	2000	0503	 96		A1	_	 2000	0831	,	WO 2	000-	US25	 18		2	0000	222
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		IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
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		DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG				
US	2001	0039	287		A1		2001	1108		US 1	999-	2569	48		1	9990:	224
CA	2371	876			A1		2000	0831	1	CA 2	000-	2371	876		2	0000	222

HU	2000 2002 2002	00023	39		A A2 A3		2000 2002 2003	0629			2000-3 2002-3		ō			0000	
EP	1230	219			A1		2002	0814	E	ŀΡ	2000-9	91331	17		2	0000	222
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		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑI	_						
BR	2000	00849	91		Α		2002	0917	В	3R	2000-8	8491			2	0000	222
JP	2002	5373	78		T		2002	1105	J	Р	2000-6	6009	79		2	0000	222
NZ	5136	48			A		2004	0227	N	ΙZ	2000-	51364	18		2	0000	222
NO	2001	00396	53		Α		2001	1023	N	10	2001-3	3963			2	0010	815
ZA	2001	00678	30		A		2002	0816	Z	Ά	2001-6	6780			2	0010	816
IN	20010	CN01	174		Α		2005	0304	I	Ν	2001-0	CN11	74		2	0010	821
MX	2001	PA08	568		Α		2002	0408	M	ĺΧ	2001-1	PA856	ŝ 8		2	0010	823
US	2002	0177	588		A1		2002	1128	U	JS	2001-9	95445	51		2	0010	917
US	6750	233			В2		2004	0615									
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									U	JS	1998-9	95501	lΡ	I	2 1	9980	806
									U	JS	1998-3	10108	30P	I	2 1	9980	918
									W	Ю	2000-	JS251	l 8	I	v 2	0000	222

OTHER SOURCE(S): MARPAT 133:193079

AB A process for treating conditions associated with pathol. matrix metalloproteinase (MMP) activity comprises administration of compds. having inhibitory activity against >1 of MMP-2, MMP-9, and MMP-13, while exhibiting substantially less inhibition of MMP-1. The compds. are of the form HONHCOCR1R2SO2R3 [R1, R2 = H; R1R2 = atoms to form a 5-8 membered ring containing 1-3 heteroatoms; R3 = (substituted) aryl, heteroaryl]. Thus, 4-PhOC6H4SH was heated in Me2SO to give the disulfide dimer, which in THF was added to a mixture of Et N-tert-butoxycarbonylisonipecotate (preparation given) and LDA in THF at -60° to room temperature to give 40% sulfide, which was oxidized with m-ClC6H4CO(OOH) to give 59% sulfone. The Et ester was saponified with NaOH in EtOH/H2O to give 100% acid, which in DMF was treated with hydroxybenzotriazole, EDC, 4-methylmorpholine, and aqueous NH2OH to give title compound I. I inhibited MMP-2 with IC50 = 0.2 nM. Pharmacol., pharmacokinetic, and toxicol. data are given for selected compds.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of arylsulfonylheterocyclylhydroxamic acids and related compds. as matrix metalloprotease inhibitors)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 41 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:811245 CAPLUS

DOCUMENT NUMBER: 132:49976

TITLE: Preparation of pyrrolo[2,3-d]pyrimidines as inhibitors

of protein tyrosine kinases such as Janus Kinase 3

INVENTOR(S): Blumenkopf, Todd Andrew; Flanagan, Mark Edward; Brown,

Matthew Frank; Changelian, Paul Steven

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA:											LICAT					ATE	
WO											1999-					9990	614
											, BY,						-
											, HR,						
											, LU,						
										SE	, SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,
							VN,										
	RW:										, ZW,						
											, NL,		SE,	BF,	ВJ,	CF,	CG,
0.7	0005		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN	, TD,	TG	100			2000	C 1 1
	2335	186			AI		1999	1223		CA .	1999-	2335	T86		1.	9990	614
	2335	186			C		2005	0329		70 F T	1000	40E4	г		1.	2000	C1 1
_	9940 7584						2000			AU .	1999-	4054	5		1.	9990	014
										TD '	2000-	3720			1 (aaan	61/1
	1087										2000- 1999-					9990	
	1087				B1		2001			EL.	1000	7230	00		Δ.		014
										GR	, IT,	LI.	LU.	NL.	SE.	PT.	IE.
					FI,		,	,	 ,		,,	,	,	,	·- /	,	,
BR	9912	171		·	Δ.		2001	0410		BR :	1999-	1217	1		19	9990	614
HU	2001	0034	72		A2		2002	0228		HU :	2001-	3472			1:	9990	614
HU	2001	0034	72		АЗ		2002	1228									
JP	2002	5183	94		Т		2002	0625		JP :	2000-	5547	34		1:	9990	614
JP	3497	823			В2		2004	0216									
	5428				В		2003				1999-					9990	
	1125				С		2003				1999-					9990	
	5080				А		2003				1999-					9990	
	2706	-					2004				1999-					9990	
	1087				_		2004				1999-					9990	
_	2223						2005	-		-	1999-					9990	-
	1999 2375		8/6		A A		2008 2007				1999- 1999-		-			9990 9990	
_	9904	-			A A		2007				1999- 1999-					9990 9990	-
	1157				A		2000			AD :	1999- 1999-	1582			1	9990	
VI.	110/				Δ		2003	0050		AL.	1 J J J J –	1000			Τ.	J J J U	O 1 /

	W:	BW,	GH,	GM,	ΚE,	MW,	SD,	UG,	ZM, ZV	W		
US	6635	762			В1		2003	1021	US	1999-335030		19990617
NO	2000	00645	54		Α		2001	0215	ИО	2000-6454		20001218
NO	3187	86			В1		2005	0509				
MX	20001	PA128	353		Α		2001	0507	MX	2000-PA12853		20001219
HR	2000	00088	36		A1		2001	1031	HR	2000-886		20001219
HR	2000	00088	36		В1		2008	0731				
BG	1051	22			Α		2001	1031	BG	2001-105122		20010108
BG	65063	3			В1		2007	0131				
HK	1036	800			A1		2004	0227	HK	2001-107740		20011106
US	2004	00589	922		A1		2004	0325	US	2003-640079		20030813
NO	2005	00020	01		Α		2001	0215	NO	2005-201		20050113
PRIORITY	APP:	LN.	INFO	. :					US	1998-89886P	P	19980619
									WO	1999-IB1110	W	19990614
									US	1999-335030	A1	19990617

OTHER SOURCE(S): MARPAT 132:49976

GΙ

The title compds. [I; Rl = II (wherein the dashed line represents optional double bonds; m = 0-3; n = 0-3; X, B, D = O, S(O)d (d = 0-2), NR6, CR7R8; A, E = CR7R8; R6 = H, alkyl, CF3, etc.; R7, R8 = H, 2H, alkyl, etc.); R2, R3 = H, NH2, halo, etc.] which are inhibitors of protein tyrosine kinases such as Janus Kinase 3 (no data) and as such useful as immunosuppressive agents for organ transplants, lupus, multiple sclerosis, rheumatoid arthritis, psoriasis, Type I diabetes and complications from diabetes, cancer, asthma, atopic dermatitis, autoimmune thyroid disorders, ulcerative colitis, Crohn's disease, Alzheimer's disease, leukemia and other autoimmune diseases, were prepared E.g., a 2-step synthesis of I [R1 = piperidino; R2 = C1; R3 = H], starting with 4-chloro-7H-pyrrolo[2,3-d]pyrimidine, was given. Compds. I are effective at 0.1-1000 mg/day.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pyrrolo[2,3-d]pyrimidines as inhibitors of protein tyrosine kinases such as Janus Kinase 3)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 42 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:640853 CAPLUS

DOCUMENT NUMBER: 131:271815

TITLE: Preparation of 2(1H)-quinolinones as serine protease

inhibitors for treatment of thrombotic disorders

INVENTOR(S): Dudley, Danette Andrea; Edmunds, Jeremy John

PATENT ASSIGNEE(S): Warner-Lambert Co., USA SOURCE: PCT Int. Appl., 136 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.									
									WO 1998-US26709									
	W:	AL,	ΑU,	BA,	BB,	ВG,	BR,	CA,	CN,	CU	J,	CZ,	EE,	GE,	HR,	HU,	ID,	IL,
		IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	Γ	J,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,
		RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US	S,	UΖ,	VN,	YU,	ΑM,	ΑZ,	BY,	KG,
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	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ΖV	N,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NI	J,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
							MR,											
CA	2312	953			A1		1999	1007		CA	19	998-	2312	953		1	9981	215
AU	9919	184			Α		1999	1018		ΑU	19	999-	1918	4		1	9981	215
	7631																	
	9815																	
EP	1091	955			A1		2001	0418		ΕP	19	998-	9639	66		1	9981	215
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	Α,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO											
	2001									HU	20	01-	1484			1	9981	215
HU	2001	0014	84		А3		2003	0228										
JP	2002	5099	28		T 20020402 A 20030829				JP 2000-541167						19981215			
NZ	5059	21			A 20030829			0829	NZ 1998-505921									
	9902														9990			
	2000																	
	US 6855726								US 2000-601479						20000803			
	2000				Α		2000	0920		ИО	20	000-	4696			2	0000	
PRIORIT	PRIORITY APPLN. INFO.:																9980	
										WO	19	998-1	JS26	709	,	W 1	9981	215

OTHER SOURCE(S): MARPAT 131:271815

2(1H) -Quinolinones (I) [where A = CH2, CH, or C(alkyl); B and D = AΒ independently H, (un)substituted (cyclo)alkyl, hetero(cyclo)alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH2, or CH2N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un)substituted aryl or heterocycle; L = H, halogen, OH, (un) substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on serine proteases such as factor Xa, thrombin and/or factor VIIa, were prepared For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(2oxo-1,2,3,4-tetrahydro-3-quinolinyl)benzenecarbonitrile (5-step preparation given) to yield the N-substituted tetrahydroquinolinone. Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinolinone to form the piperidinylpentyl derivative This intermediate was converted to the title quinolinone II.2HCl by treatment with NH2OH.HCl followed by addition of CF3CO2H and reduction with Pd/C. Typically, the compds. of the invention showed 50% inhibition of factor Xa proteolytic activity on a synthetic substrate in concns. ranging from 50 μM to 1 nM. II demonstrated inhibitory activity in standard assays of thrombin (IC50 = 1.14 μM), trypsin (IC50 = 0.562 $\mu\text{M})\text{,}$ and factor Xa (IC50 = 0.02 $\mu\text{M})\text{.}$ Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and cerebral infarction, restenosis, cancer, angina, diabetes, heart failure, and atrial fibrillation in mammals.

IT 766-17-6, cis-2,6-Dimethylpiperidine

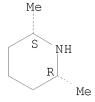
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 2(1H)-quinolinones as serine protease inhibitors for treatment of thrombotic disorders)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 43 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:640844 CAPLUS

DOCUMENT NUMBER: 131:271886

TITLE: Preparation of quinoxalinones as serine protease

inhibitors for treatment of thrombotic disorders

INVENTOR(S): Dudley, Danette Andrea; Edmunds, Jeremy John

PATENT ASSIGNEE(S): Warner-Lambert Co., USA SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950254	A1	19991007	WO 1998-US26704	19981215

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W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL,
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             RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                                             EP 1998-963961
                          Α1
                                                                     19981215
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             IE, SI, LT, LV, FI, RO
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                                20011028
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                                                                     20020104
     US 6916805
                          В2
                                20050712
                                             US 1998-800422
WO 1998-US26704 W 19981213
1000 601606 A3 20000803
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                        MARPAT 131:271886
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

2(1H)-Quinoxalinones (I) [where A = N, N(alkyl)CH2, CH2N(alkyl), NO; B and AΒ D = independently H, (un)substituted (cyclo)alkyl, hetero(cyclo)alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH2, or CH2N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un) substituted aryl or heterocycle; L = H, halogen, OH, (un) substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on serine proteases such as factor Xa, thrombin, trypsin, and/or factor VIIa, were prepared For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(3-oxo-3,4-dihydro-2-quinoxalinyl)benzenecarbonitrile (6-step preparation given) to yield the N-substituted dihydroquinoxaline. Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinoxalinone to form the piperidinylpentyl derivative This intermediate was debenzylated and the nitrile converted to the carboximidamide to form the title quinoxalinone (II).2HCl. Typically, the compds. of the invention showed 50% inhibition of factor Xa proteolytic activity on a synthetic substrate in concns. ranging from 50 μM to 1 nM. II demonstrated inhibitory activity in standard assays of thrombin (IC50 = 2.96 μM), trypsin (IC50 = $2.03 \mu M$), and factor Xa (IC50 = $0.065 \mu M$). At a concentration of 100 $\mu\text{M}\textsc{,}$ II inhibited the catalytic activity of human tissue factor/factor VIIa complex by 16%. In an in vitro assay, II demonstrated human prothrombinase (PTase) complex inhibition with an IC50 of 0.0015 μM . The effects of II on thrombosis and hemostasis was studied in a rabbit veno-venous shunt model and in a dog electrolytic injury model of thrombosis. At the highest dose, II prolonged a PTT and PT by a 5- and 3.9-fold, resp., for the veno-venous shunt model and by 1.4- and 1.75-fold, resp., for the electrolytic injury model. Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and

cerebral infarction, restenosis, cancer, angina, diabetes, heart

failure, and atrial fibrillation in mammals.

IT 766-17-6, cis-2,6-Dimethylpiperidine

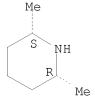
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 2(1H)-quinolinones as serine protease inhibitors for treatment of thrombotic disorders)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 44 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:511159 CAPLUS

DOCUMENT NUMBER: 131:157709

TITLE: Preparation of bicyclic pyridine and pyrimidine

derivatives as neuropeptide Y receptor antagonists

INVENTOR(S): Norman, Mark H.; Chen, Ning; Han, Nianhe; Liu,

Longbin; Hurt, Clarence R.; Fotsch, Christopher H.;

Jenkins, Tracy J.; Moreno, Ofir A.

PATENT ASSIGNEE(S): Amgen Inc., USA

SOURCE: PCT Int. Appl., 469 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.			KIN	D	DATE APPLICATION NO.					DATE							
WO	9940	091			A1		1999	0812	,	WO 1	999-1	US25	00		1	9990	205
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		DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,
				•			LC,					•					•
							PT,			SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,
							VN,						~	~			
	RW:	•	•	•	•		SD,	•	•		•	•	•	•	•	•	•
				•	•		IT,	•	•	•	•	SE,	BF,	BJ,	CF,	CG,	CI,
IIC	6197		•	•		•	MR,					2467	75		1 (9990.	204
	US 6187777 CA 2319275						CA 1999-2319275							9990. 9990.	-		
_	CA 2319275									C11 1.		2317	2,5			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	200
	9926						1999			AU 19	999-	2659	0		19	9990.	205
AU	7479						2002										
EP	1054	887			A1		2000	1129		EP 1	999-	9067	56		1:	9990.	205
EP	1054	887			В1		2006	0412									
	R:						ES,		GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
							RO,										
	2003									JP 2			-			9990.	
	3230						2006			AT 1:						9990.	
PΤ	1054	887			Т		2006	0630		PT 19	999-	9067	56		1:	9990.	205

ES 2257851	Т3	20060801	ES	1999-906756		19990205
ZA 9900967	Α	19990806	ZA	1999-967		19990208
MX 2000PA07662	Α	20010219	MX	2000-PA7662		20000804
US 6583154	В1	20030624	US	2000-640263		20000816
PRIORITY APPLN. INFO.:			US	1998-73927P	P	19980206
			US	1998-73981P	P	19980206
			US	1998-93482P	P	19980720
			US	1998-93577P	P	19980720
			US	1999-246775	A	19990204
			WO	1999-US2500	W	19990205

OTHER SOURCE(S): MARPAT 131:157709

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GΙ

Title compds.[I; R = H, CH3, (CH3)2CH, SCH3, CH3CH2, NH2, CF3, NHCOC6H5, AB cyclopropyl, CH2OH, (CH3)2CH2CH2, N(CH3)2, OCH3, NHCH3, NH(CH2)4NH2; R1 = NH, S, NCH3, O; R2 = H, COCH3, C6H5, CH3, CH3CH2; R3 = NH2, CH3, NHC6H5, N(CH2CH3)2, (CH3CH2)N(CH2)3CH3, (CH3)N(CH2)2NHCH3, N(CH3)CH(CH3)CH(Ph)OH, (CH3CH2)NCH2C(CH3):CH2, NHCH2CF3, NHCH2CH2C6H5, NH(CH2)3OCH2CH3, 4-ClC6H4, 4-CH3OC6H5, 2-thienyl, 1-pyrrolidinyl, 1-piperidinyl, 4-morpholinyl, 1-piperazinyl, 3-pyridyl; R4 = C6H5, 4-CH3C6H4, 4-ClC6H4, (CH3)3C, 4-FC6H4, 3-HOC6H4, 2-pyridyl, cyclohexyl, 2-furyl, 2-FC6H4 2-thienyl, 1-adamantyl, CH3, 4-CH3OC6H4; X = N, CH; etc.], pharmaceutical acceptable salts, ester, solvate, and N-oxide are prepared and tested as neuropeptide Y receptor antagonists in the modulation of feeding behavior, obesity, diabetes, cancer, inflammatory disorders, depression, stress related disorders, Alzheimer's disease and other disease conditions. Thus, the title compound I (R = CH3; R1 = NH; X = N; R2 = H; R3 = CH3; R3 = CH3; R4 = CH3; R4 = CH3; R5 = CHN(CH2CH3)2; R4 = C6H5) was prepared

TT 766-17-6, cis-2,6-Dimethylpiperidine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrrolopyridine and pyrrolopyrimidine derivs. as neuropeptide Y receptor antagonists)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 45 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:350651 CAPLUS

DOCUMENT NUMBER: 131:18929

TITLE: Preparation of arylsulfonylheterocyclylhydroxamic

acids and related compounds as matrix metalloprotease

inhibitors

INVENTOR(S): Barta, Thomas E.; Becker, Daniel P.; Boehm, Terri L.;

De Crescenzo, Gary A.; Villamil, Clara I.; McDonald,

Joseph J.; Freskos, John N.; Getman, Daniel P.

PATENT ASSIGNEE(S): G.D. Searle and Co., USA SOURCE: PCT Int. Appl., 840 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

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	 10 992			•	A1		1999									.9981	112	
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		KG	, KP,	KR,	KZ,	LC,	, LK,	LR,	LS,	LT	, LU,	LV,	MD,	MG,	MK,	MN,	MW,	
		MX	, NO,	NZ,	PL,	PT,	, RO,	RU,	SD,	SE	, SG,	SI,	SK,	SL,	TJ,	TM,	TR,	
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С	A 230	6460			A1		1999	0527		CA :	1998-	-2306	460		1	9981	112	
А	.U 991	3732			Α		1999	0607		AU :	1999-	1373	2		1	9981	112	
A	.U 756	5150			В2		2003	0102										
В	R 981	4643			A		2000	1003		BR :	1998-	1464	3		1	9981	112	
E	P 104	12290			A1		2000	1011		EP :	1998-	9574	85		1	9981	112	
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J	P 200	1523			T		2001	1127		JP 2	2000-	5210	71		1	9981	112	
N	Z 503	3485			A C2		2002	1025		NZ :	1998- 2000- 1998-	5034	85		1	.9981	112	
R	U 225	0105			C2		2005	0420		RU 2	2000-	1159	48		1	.9981	112	
	A 981				Δ		1999	1209		ZA :	1998-	1041	2		1	.9981	113	
U	S 200	1001	4688		A1		2001	0816		US :	1998-	1911	29		1	.9981	113	
N	0 200	00002	469		A		2000	0712			2000-					20000	512	
	X 200		4660		A		2001	0930			2000-					20000		
	S 654				В1		2003	0401								20000	731	
	S 200		7588		A1		2002			US 2	2001-	9544	51		2	20010	917	
	S 675				В2		2004											
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	S 689				В2		2005											
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PRIORI	TY AE	PPLN.	INFO	.:							1997-					.9971		
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OTHER GT	SOUR	CE(S)	:		MAR	PAT	131:	1892	9									

A process for treating conditions associated with pathol. matrix metalloproteinase (MMP) activity comprises administration of compds. having inhibitory activity against >1 of MMP-2, MMP-9, and MMP-13, while exhibiting substantially less inhibition of MMP-1. The compds. are of the form HONHCOCR1R2SO2R3 [R1, R2 = H; R1R2 = atoms to form a 5-8 membered ring containing 1-3 heteroatoms; R3 = (substituted) aryl, heteroaryl]. Thus, 4-PhOC6H4SH was heated in Me2SO to give the disulfide dimer, which in THF was added to a mixture of Et N-tert-butoxycarbonylisonipecotate (preparation given) and LDA in THF at -60° to room temperature to give 405 sulfide, which was oxidized with m-ClC6H4CO(OOH) to give 59% sulfone. The Et ester was saponified with NaOH in EtOH/H2O to give 100% acid, which in DMF was treated with hydroxybenzotriazole, EDC, 4-methylmorpholine, and aqueous NH2OH to give title compound (I). I inhibited MMP-2 with IC50 = 0.2 nM.

504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of arylsulfonylheterocyclylhydroxamic acids and related compds. as matrix metalloprotease inhibitors)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 46 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:816108 CAPLUS

DOCUMENT NUMBER: 130:66389

TITLE: Preparation of indole derivatives as gonadotropin

releasing hormone antagonists

INVENTOR(S): Goulet, Mark; Chu, Lin; Walsh, Thomas F.; Fisher,

Michael H.; Girotra, Narindar N.; Wyvratt, Matthew J.;

Lin, Peter; Ashton, Wallace T.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

U.S., 59 pp. CODEN: USXXAM SOURCE:

DOCUMENT TYPE: Patent

English LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5849764	A	19981215	US 1996-760817	19961205

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MARPAT 130:66389

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R8 R10 N A-R1
R7 X R10 N A-R1
R8 R10 N R9 R9'
R9'

AΒ The title compds. I [A = (halo)alkyl, (un)substituted cycloalkyl, alkenyl, or alkynyl, alkoxy, alkylthio, alkoxyalkyl, bond, etc.; R0 = H, (un) substituted alkyl, aryl, or aralkyl; R1 = various (un) substituted heterocycles; R2 = H, (un)substituted alkyl, aralkyl, aryl, etc.; R2 and A may form 5- to 7-atom ring; R3, R4, R5 = H, (un)substituted alkyl or alkenyl, cyano, nitro, halo; R6 = H, (un)substituted alkyl, aryl, cyano, NO2, halo, etc.; R7 = H, (un)substituted alkyl, or is absent; R8 = H, CO2H or derivs., NH2 or derivs., OH or SH or derivs., etc.; or R7 and R8 form a C3-7 carbocyclic ring; R9, R9', R10, R10' = H, (un)substituted alkyl, aryl, or aralkyl; X = H, halo, N, O, S(O)0-2, CO, CH2, etc.; m = 0-3] (claimed) and similar compds. were prepared as antagonists of gonadotropin releasing hormone (no data). The compds. are thus useful for treatment of a variety of conditions including hormone-dependent cancers, benign prostatic hypertrophy, endometriosis, irritable bowel syndrome, etc. For instance, amidation of 3-(1H-indol-5-yl)propionic acid with 2-[2-(3,4-dimethoxyphenyl)-1H-indol-3-yl]ethylamine using EDC and HOBT, and reduction of the amide product to a secondary amine using LiAlH4 in THF at 77°, gave the invention compound II.

ΙI

IT 192717-09-2P 192717-10-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. as gonadotropin releasing hormone antagonists)

RN 192717-09-2 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 192717-10-5 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(3-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 47 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:638427 CAPLUS

DOCUMENT NUMBER: 127:242933

ORIGINAL REFERENCE NO.: 127:47247a,47250a

TITLE: Inhibition of Tubulin Polymerization by

5,6-Dihydroindolo[2,1-a]isoquinoline Derivatives
AUTHOR(S):
Goldbrunner, Michael; Loidl, Guenther; Polossek,
Thomas; Mannschreck, Albrecht; von Angerer, Erwin

CORPORATE SOURCE: Institut fuer Pharmazie and Institut fuer Organische

Chemie, Universitaet Regensburg, Regensburg, D-93040,

Germany

SOURCE: Journal of Medicinal Chemistry (1997), 40(22),

3524-3533

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB 6-Alkyl-12-formyl-5,6-dihydroindolo[2,1-a]isoquinolines inhibit the growth of human mammary carcinoma cells by an unknown mode of action. One of the possible mol. targets is the tubulin system which is involved in cell division. A number of 5,6-dihydroindolo[2,1-a]isoquinolines with methoxy or hydroxy groups in positions 3, 9, and/or 10 and various functional groups such as formyl, acetyl, cyano, alkylimino, and alkylamino in position 12 were synthesized and evaluated for both inhibition of tubulin polymerization

and

cytostatic activity in MDA-MB 231 and MCF-7 human breast cancer cells. In the tubulin polymerization assay, only hydroxy derivs. were active, whereas both the hydroxy derivs. and some of the methoxy compds. inhibited cell growth. In order to establish a correlation between the inhibition of tubulin polymerization and cytostatic activity in the hydroxy series, 2 of

the

most active racemates were separated into the enantiomers. In both assays, the relative potencies of the hydroxy derivs. were in a similar order. Highest activity was found for the (+)-isomers of 6-propyl- and 6-butyl-12-formyl-5,6-hydro-3,9-dihydroxyindolo[2,1-a]isoquinoline with IC50 values of 11 and 3.1 μM , resp., for the polymerization of tubulin at 37° (colchicine: 2.1 μM). The active hydroxy derivs. displaced 40-70% of [3H]colchicine from its binding site in the tubulin at concns. 10-fold higher than that of colchicine. Hydroxy-substituted indolo[2,1-a]isoquinolines bind to the colchicine-binding site and inhibit the polymerization of tubulin. This action can be assumed to be responsible

for

CN

the cytostatic activity of the hydroxy derivs, and might also contribute to the antitumor effect of the corresponding Me ethers.

IT 195731-21-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(inhibition of tubulin polymerization by dihydroindoloisoquinolines)

RN 195731-21-6 CAPLUS

Isoquinoline, 1-[(2-bromo-4,5-dimethoxyphenyl)methyl]-3-butyl-1,2,3,4-tetrahydro-6-methoxy- (CA INDEX NAME)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 48 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:511777 CAPLUS

DOCUMENT NUMBER: 127:121742

ORIGINAL REFERENCE NO.: 127:23485a, 23488a

TITLE: Preparation of heterocyclic compounds as antagonists

of gonadotropin releasing hormone

INVENTOR(S): Goulet, Mark; Ashton, Wallace T.; Chu, Lin; Fisher,

Michael H.; Girotra, Narindar N.; Lin, Peter; Wyvratt,

Matthew J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Goulet, Mark; Ashton, Wallace

T.; Chu, Lin; Fisher, Michael H.; Girotra, Narindar

N.; Lin, Peter; Wyvratt, Matthew J.

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

							DATE										
							1997										
	W:	AL,	ΑM,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,
							KZ,										
		NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	ΤJ,	TM,	TR,	TT,	UA,	US,	UZ,	VN
	RW:						UG,										
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,
		MR,	NE,	SN,	TD,	ΤG											
CA	2240	108			A1		1997	0619		CA 1	996-	2240	108		1	9961	210
ΑU	9714	106			Α		1997 1999	0703		AU 1	997-	1410	6		1	9961	210
AU	7076	41			В2		1999	0715									
							1998			EP 1	996-	9442	49		1	9961	210
							2002										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,										
CN	1208	412			А		1999										
JР	1208 1150 3230	6471			${ m T}$		1999			JP 1	997-	5221	24		1	9961	210
JР	3230	818			В2		2001										
	2001						2001										
	9903						2001			HU 1	999-	3671			1	9961	210
	9903				А3		2001										
ΑT	2150	81			T		2002										
ES	2174	129			Т3		2002										
	9610						1997										
	9802				A		1998	0813									
RITY	Y APP	LN.	TNEO	.:						US 1	995-	8633	Р		P 1	9951	214
												3242					
												5221			-	9961	-
_ ~							107.	4045			996-	US19	444		w 1	9961	210

OTHER SOURCE(S): MARPAT 127:121742

GI

$$R^{8}$$
 R^{7}
 R^{8}
 R^{2}
 R^{20}
 R^{10}
 R^{10

Me

AB The title compds. I [A = alkyl, etc.; R = H, alkyl, etc.; R1 = heterocyclic ring (generic structures given); R2 = H, alkyl, etc.; or R2A = ring; R3, R4, R5 = H, (un)substituted alkyl, alkenyl, etc.; or R3R4 = ring; R6 = H, (un)substituted alkyl, etc.; R7 = H, (un)substituted alkyl; unless X is hydrogen or halo, then R7 is absent; R8 = heterocyclic ring, etc.; or R7R8 = heterocyclic ring; R9, R19 = H, (un)substituted alkyl; further details on R9R19 and R9A are given; R20, R10 = H, (un)substituted alkyl, etc.; further details on R20R10, and R9R20, R9R2, R20R2, R20A are given; m = 0 to 3; X = N, etc.], useful as antagonists of gonadotropin releasing hormone (no data), are prepared I may be useful for the treatment of a variety of sex-hormone related and other conditions in both men and women. The title compound II was prepared in a multistep process.

II 192644-63-6P 192644-64-7P

ΙI

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as antagonists of gonadotropin releasing hormone)

RN 192644-63-6 CAPLUS

CN 1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]-1H-indol-5-yl]-2-methyl(CA INDEX NAME)

RN 192644-64-7 CAPLUS

CN 1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3[[6-[3-(3-pyridinyl)propyl]-2-piperidinyl]methyl]-1H-indol-5-yl]-2-methyl(CA INDEX NAME)

L25 ANSWER 49 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:313379 CAPLUS

DOCUMENT NUMBER: 125:75406

ORIGINAL REFERENCE NO.: 125:14067a,14070a

TITLE: Assessment of a cytoprotection assay for the discovery

and evaluation of anti-human immunodeficiency virus compounds utilizing a genetically-impaired virus

AUTHOR(S): Kiser, Rebecca; Makovsky, Susan; Terpening, Sara J.;

Laing, Noel; Clanton, David J.

CORPORATE SOURCE: NCI-AIDS Drug Screening and Development Laboratory,

SAIC-Frederick, NCI-FCRDC, Frederick, MD, 21702-1201,

USA

SOURCE: Journal of Virological Methods (1996), 58(1,2), 99-109

CODEN: JVMEDH; ISSN: 0166-0934

PUBLISHER: Elsevier DOCUMENT TYPE: Journal

LANGUAGE: English

AB A biol. contained cytoprotection assay was developed to screen inhibitors of the human immunodeficiency virus without the need for high level containment or practices. The virus used has multiple point mutations that have destroyed its ability to produce both Rev and Tat, proteins essential for virus replication in vitro. The original cell line employed (CEM-SSTART) contains a genetic construct that allows for the continuous expression of both Rev and Tat, and a subclone (1A2) was developed that provides for maximum acute cytopathic effect. The National Cancer Institute's AIDS drug screening assay was used to test known drugs with both HIVIIIB virus in the T4 lymphocytic cell line CEM-SS and mutant virus in the 1A2 subclone. This cell-based assay uses the tetrazolium salt, XTT, as an indicator of cellular metabolism after the cells have been infected with virus. The results of extensive testing have shown that the assay using mutant virus is comparable to the current NCI AIDS drug screen. After 42 days in 1A2 or CEM-SS cell culture, the virus or the integrated genome did not revert to wild-type, and the virus produced in 1A2 cells was unable to replicate in PBMCs. Mutant viral stocks were devoid of wild-type virus as determined by a PCR assay that would have found 60-600 copies of mutant RNA. These materials, which are now available to the scientific community (NIH AIDS Research and Reference Reagent Program), should be useful tools to screen and test compds. for potential inhibition of HIV in labs. not equipped to maintain and use wild-type infectious virus. ΙT 137893-48-2, Michellamine B

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(assessment of cytoprotection assay for discovery and evaluation of anti-human immunodeficiency virus compds. utilizing a genetically-impaired virus)

RN 137893-48-2 CAPLUS

CN 6,8-Isoquinolinediol, 5,5'-(1,1'-dihydroxy-8,8'-dimethoxy-6,6'-dimethyl[2,2'-binaphthalene]-4,4'-diyl)bis[1,2,3,4-tetrahydro-1,3-dimethyl-, (1R,1'R,3R,3'R,5R,5'S)- (CA INDEX NAME)

L25 ANSWER 50 OF 55 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:483015 CAPLUS

DOCUMENT NUMBER: 121:83015

ORIGINAL REFERENCE NO.: 121:14913a, 14916a

TITLE: Dibenzo[a,f]quinolizines: syntheses and cytostatic

activity in estrogen-sensitive tumor cells

AUTHOR(S): von Angerer, Silvia; Seidl, Engelbert; Mannschreck,

Albrecht; von Angerer, Erwin; Wiegrebe, Wolfgang

CORPORATE SOURCE: Inst. Pharm., Univ. Regensburg, Regensburg, D-93040,

Germany

SOURCE: Anti-Cancer Drug Design (1994), 9(1), 25-40

CODEN: ACDDEA; ISSN: 0266-9536

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

A number of methoxy-substituted 7,11b,12,13-tetrahydro-6Hdibenzo[a,f]quinolizines with short alkyl groups in position 6 or 12 were synthesized by the Bischler-Napieralski reaction using the appropriate starting material followed by a 2nd ring closure reaction involving a base-generated benzyne intermediate. The methoxy functions in positions 2 or 3 and 9 were cleaved with BBr3 and the free hydroxy groups converted into the acetates. The enantiomers of 2 of these derivs. were separated by liquid chromatog. on triacetylcellulose. Compds. with alkyl substituents bind strongly to the estrogen receptor except those with a cis-orientation at the central ring connection. The RBA values ranged from 2.2-10.8(17 β -estradiol: RBA = 100). There was no major difference in binding between the (+) and (-)-enantiomers. The 3,9-diacetoxy-6-alkyl derivs. also showed binding affinity for the progesterone receptor (RBA: 1.2-3.1). The 2,9-diacetoxydibenzoquinolizines trans-I (R = Et and Pr) strongly inhibited the growth of hormone-sensitive MCF-7 breast cancer cells at concns. of 10-6 M and higher but were inactive in hormone-independent MDA-MB 231 breast cancer cells. Preliminary tests with hormone-dependent MXT mouse mammary tumors as model showed that these compds. have also antineoplastic activity in vivo. Trans-I (R = Et) at a dose of 20 mg/kg body weight, administered 3 times/wk, inhibited the growth of these tumors by 78% (tamoxifen: 76% inhibition). Studies on the estrogenic and antiestrogenic properties of these agents in mice revealed that they are mixed agonists/antagonists with strong antiestrogenic activity at low doses but significant estrogenic effects at higher doses.

IT 156417-29-7P 156417-30-0P 156417-31-1P 156417-32-2P 156417-33-3P 156417-34-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of

diacetoxydibenzoquinolizines)

RN 156417-29-7 CAPLUS

CN Isoquinoline, 1-[2-(2-bromo-5-methoxyphenyl)ethyl]-1,2,3,4-tetrahydro-6-methoxy-3-methyl- (CA INDEX NAME)

RN 156417-30-0 CAPLUS

CN Isoquinoline, 1-[2-(3-bromo-4-methoxyphenyl)ethyl]-1,2,3,4-tetrahydro-6-methoxy-3-methyl- (CA INDEX NAME)

RN 156417-31-1 CAPLUS

CN Isoquinoline, 1-[2-(2-bromo-5-methoxyphenyl)ethyl]-3-ethyl-1,2,3,4-tetrahydro-6-methoxy- (CA INDEX NAME)

RN 156417-32-2 CAPLUS

CN Isoquinoline, 1-[2-(3-bromo-4-methoxyphenyl)ethyl]-3-ethyl-1,2,3,4-tetrahydro-6-methoxy- (CA INDEX NAME)

RN 156417-33-3 CAPLUS

CN Isoquinoline, 1-[2-(2-bromo-5-methoxyphenyl)ethyl]-1,2,3,4-tetrahydro-6-methoxy-3-propyl- (CA INDEX NAME)

RN 156417-34-4 CAPLUS

CN Isoquinoline, 1-[2-(3-bromo-4-methoxyphenyl)ethyl]-1,2,3,4-tetrahydro-6-methoxy-3-propyl- (CA INDEX NAME)

```
=> s 122/biol
         2516 L22
      7472908 BIOL/RL
L26
         529 L22/BIOL
               (L22 (L) BIOL/RL)
=> s 122/uses
         2516 L22
      7150149 USES/RL
          274 L22/USES
                (L22 (L) USES/RL)
=> s (cancer OR "Cancer (genus)")
       370638 CANCER
        54465 CANCERS
       384282 CANCER
               (CANCER OR CANCERS)
       370638 "CANCER"
        54465 "CANCERS"
       384282 "CANCER"
               ("CANCER" OR "CANCERS")
        53989 "GENUS"
          103 "GENUSES"
        18740 "GENERA"
            8 "GENERAS"
        68072 "GENUS"
               ("GENUS" OR "GENUSES" OR "GENERA" OR "GENERAS")
           48 "CANCER (GENUS)"
               ("CANCER"(W)"GENUS")
L28
       384282 (CANCER OR "CANCER (GENUS)")
=> s L26 AND L28
L29 19 L26 AND L28
=> s L27 AND L28
L30 17 L27 AND L28
=> d L29 10-19 ibib abs hitstr
L29 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                      2006:699811 CAPLUS
DOCUMENT NUMBER:
                       145:165623
TITLE:
                       Manufacture of β-L-homofuconojirimycin with
                       Penicillium
                       Kita, Yuichi; Kondo, Satoru; Tomoda, Akihiro;
INVENTOR(S):
                       Ichikawa, Masako; Takahashi, Atsushi
                      Hokko Chemical Industry Co., Ltd., Japan
PATENT ASSIGNEE(S):
                       Jpn. Kokai Tokkyo Koho, 7 pp.
SOURCE:
                       CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                       KIND
                              DATE
                                          APPLICATION NO.
                              _____
                                          JP 2005-324
JP 2005-324
                       A 20060720
    JP 2006187223
                                                                 20050105
PRIORITY APPLN. INFO.:
                                                                 20050105
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AB The β -L-homofuconojirimycin (I), an fucosidase inhibitor and inhibitor for metastasis of tumor, is manufactured with Penicillium. Shake culture of Penicillium, and chromatog. isolation of I from culture supernatant were shown.

Absolute stereochemistry.

L29 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:410153 CAPLUS

DOCUMENT NUMBER: 144:450708

TITLE: Imidazolecarboxamides and related compounds as

inhibitors of c-fms kinase and their preparation, pharmaceutical compositions and use for treatment of

various inflammations, cancers, and

cardiovascular diseases

INVENTOR(S): Illig, Carl; Ballentine, Shelley; Chen, Jinsheng;

Meegalla, Sanath; Rudolph, M.; Wall, Mark; Wilson, Ken; Desjarlais, Renee; Molloy, Christopher; Manthey,

Carl; Flores, Christopher

PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.

SOURCE: PCT Int. Appl., 170 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAI	ENT :	NO.			KIN	D	DATE			APPL	_					ATE	
WO	2006	0472	 77		A2	_	2006	0504									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,
		NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
		SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
		YU,	ZA,	ZM,	ZW												
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		IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
AU	2005	2998	37		A1		2006	0504		AU 2	005-	2998	37		2	0051	020
CA	2585	053			A1		2006	0504		CA 2	005-	2585	053		2	0051	020
ΕP	1807	077			A2		2007	0718		EP 2	005-	8153	61		2	0051	020
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												

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JP 2008517926 T 20080529 JP 2007-538060 20051020 MX 200704784 A 20070911 MX 2007-4784 20070420 IN 2007KN01436 A 20070720 IN 2007-KN1436 20070423 NO 2007002489 A 20070629 NO 2007-2489 20070515 KR 2007085382 A 20070827 KR 2007-711145 20070516 PRIORITY APPLN. INFO.: US 2004-621211P P 20041022 WO 2005-US37868 W 20051020 OTHER SOURCE(S): CASREACT 144:450708; MARPAT 144:450708
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

GΙ

The invention is directed to compds. of formula I as well as solvates, AR hydrates, tautomers and pharmaceutically acceptable salts thereof, that inhibit protein tyrosine kinases, especially c-fms kinase. Methods of treating autoimmune diseases; and diseases with an inflammatory component; treating metastasis from ovarian cancer, uterine cancer, breast cancer, colon cancer, stomach cancer, hairy cell leukemia and non-small lung carcinoma; and treating pain, including skeletal pain caused by tumor metastasis or osteoarthritis, or visceral, inflammatory, and neurogenic pain; as well as osteoporosis, Paget's disease, and other diseases in which bone resorption mediates morbidity including arthritis, prosthesis failure, osteolytic sarcoma, myeloma, and tumor metastasis to bone with the compds. of formula I, are also provided. Compound of formula I wherein A is (un)substituted Ph, (un)substituted pyridyl, or 4-aminophenyl; W is (un)substituted pyrrolyl, (un)substituted imidazolyl, (un) substituted isoxazolyl, (un) substituted oxazolyl, (un) substituted 1,2,4-triazolyl, or (un) substituted furanyl; R2 is (un) substituted cycloalkyl, (un) substituted thiophenyl, (un) substituted dihydrosulfonopyranyl, (un)substituted Ph, (un)substituted furanyl, (un) substituted tetrahydropyridyl, or (un) substituted dihydropyranyl; X is (un) substituted heterocycles; and their solvates, hydrates, tautomers, or pharmaceutically acceptable salts are claimed in this invention. Example compound cis- and trans-II.2TFA were prepared by Boc-protection of 2,6-dimethyl-4-piperidinone; the resulting N-Boc-2,6-dimethyl-4piperidinone underwent sulfonylation to give 2,6-dimethyl-4trifluoromethanesulfonyloxy-3,6-dihydro-2H-pyridine-1-carboxylic acid tert-Bu ester, which underwent Suzuki coupling with 4-aminophenylboronic acid to give 4-(4-aminophenyl)-2,6-dimethyl-3,6-dihydro-2H-pyridine-1carboxylic acid tert-Bu ester, which underwent hydrogenation to give 4-(4-aminophenyl)-2,6-dimethylpiperidine-1-carboxylic acid tert-Bu ester, which underwent Suzuki coupling with cyclohex-1-enylboronic acid; the resulting 4-(4-amino-3-cyclohex-1-enylphenyl)-2,6-dimethylpiperidine-1carboxylic acid tert-Bu ester reacted with 4-cyano-1-(2trimethylsilanylethoxymethyl)-1H-imidazole-2-carboxylic acid potassium salt followed by separation of isomers to give cis- and trans-4-(4-[[4-cyano-1-(2-trimethylsilanylethoxymethyl)-1H-imidazole-2-carbonyl]amino]-3-cyclohex-1-enylphenyl)-2,6-dimethylpiperidine-1-carboxylic acid tert-Bu esters which underwent hydrolysis to give example compds. cis- and trans-II.2TFA. All the invention compds. were evaluated for their c-fms kinase inhibitory activity. From the assay, it was determined that cis-II.2TFA exhibited and IC50 value of 0.20 nM and trans-II.2TFA showed and IC50 value of 0.40 nM. 885692-87-5P 885948-24-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of imidazolecarboxamides and related compds. as inhibitors of c-fms kinase useful for treatment of inflammations, cancers, and cardiovascular diseases)

RN 885692-87-5 CAPLUS

CN 1H-Imidazole-2-carboxamide, 5-cyano-N-[2-(1-cyclohexen-1-yl)-4-[(2R,6R)-2,6-dimethyl-4-piperidinyl]phenyl]-, rel-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1

CRN 885692-86-4 CMF C24 H29 N5 O

Relative stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 885948-24-3 CAPLUS

CN 1H-Imidazole-2-carboxamide, 5-cyano-N-[2-(1-cyclohexen-1-yl)-4-[(2R,6S)-2,6-dimethyl-4-piperidinyl]phenyl]-, rel-, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1

CRN 885948-23-2 CMF C24 H29 N5 O

Relative stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

L29 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:367143 CAPLUS

DOCUMENT NUMBER: 144:412493

TITLE: Rhodanine derivatives as PPAR receptor modulators and

their preparation, pharmaceutical compositions and use

for treatment and prophylaxis of various diseases

INVENTOR(S): Sarshar, Sepehr; Marappan, Subrumanian

PATENT ASSIGNEE(S): Auspex Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D i	DATE			APPLICATION NO.					DATE			
-	2006 2006	-			A2 A3		 2006 2006			WO 2	005-	 US35	832		20	0051	004	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
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		NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	
		SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	
		YU,	ZA,	ZM,	ZW													
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,	

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

US 2004-616574P

P 20041005

OTHER SOURCE(S):

CASREACT 144:412493; MARPAT 144:412493

III

GΙ

AΒ Processes for the preparation of compds. of formulas I and II are described. These compds. can be used as PPAR modulators and for the treatment and/or management of cancer, inflammation, cellular differentiation and proliferation, wound healing, metabolism of lipids and carbohydrates, obesity, diabetes, and energy homeostasis. Compds. of formula I and II wherein X1 and X2 are independently O, S, or NH; Y is (un)substituted C1-10 alkyl; R1 is (un)substituted C5-11 oxocycloalkenyl, (R9CO)(R10CO)CH, or (un) substituted dioxodioxanyl; R9 and R10 are independently OH, alkoxyl, aryloxy, NH2, alkylamino, arylamino, N-aryl-N-alkylamino, -NHNH2, alkylhydrazino, arylhydrazino, N-aryl-N-alkylamino, NHOH and derivs., alkyl, or aryl; R2 and R3 are independently H, halo, or alkyl; R4 is substituted aryl and heteroaryl; and their pharmaceutically acceptable salts, and prodrugs thereof are claimed. Example compound III was prepared by addition of methyllithium to 4-(diethoxymethyl) benzaldehyde to give the corresponding alc., which was oxidized to give 4-(diethoxymethyl)acetophenone, which underwent acylation with di-Et carbonate; the resulting 2-[4-(diethoxymethyl)benzoyl]acetate underwent alkylation with 4-chloromethyl-5-methyl-2-phenyloxazole followed by decarboxylation to give 4-[3-(5-methyl-2-phenyl-4oxazolyl)propionyl]benzaldehyde, which underwent condensation with rhodanine-N-propionic acid to give 4-[3-(5-methyl-2-phenyl-4oxazolyl)propionyl]benzylidene-3-(β -carboxyethyl)rhodanine, which underwent hydrogenation to give example compound III. The invention compds. were evaluated for their PPAR- γ modulating activity. From the assay, it was determined example compound III exhibited an EC50 0.127 μM . 104343-33-1, MDL-25637 ΙT RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(preparation of rhodanine derivs. as PPAR receptors modulators useful in treatment and prophylaxis of diseases)

RN 104343-33-1 CAPLUS

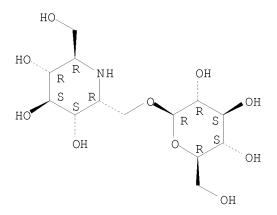
CN

(Biological study); USES (Uses)

 β -D-Glucopyranoside, [(2R,3S,4S,5R,6R)-3,4,5-trihydroxy-6-

(hydroxymethyl)-2-piperidinyl]methyl (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L29 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:718513 CAPLUS

DOCUMENT NUMBER: 141:225770

TITLE: Preparation of of aza-sugar derivatives as anticancer

agents

INVENTOR(S): Arora, Jasbir Singh; Gupta, Nidhi; Salman, Mohammad;

Gupta, Jang Bahadur; Pandit, Upendra Kumar

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	TENT :	NO.			KIND DATE					APPL	ICAT	ION 1	NO.	DATE			
	WO	2004	0742	 51		A1	_	2004	0902	,	WO 2	003-	 IB61	9		2	0030	220
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
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		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FΙ,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	·
	AU	2003	2060	21	·	A1	·	2004	0909		AU 2	003	2060.	21	·	2	0030	220
	ΕP	1597	231			A1		2005	1123		EP 2	003-	7029	0 4		2	0030	220
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	US	2006	0241	114		A1	·	2006	1026		US 2	005-	5464	62		2	0050	819
	IN	2005	DN04	194		A		2007	1207		IN 2	005-	DN41	94		2	0050	916
PRIOR	RIT	Y APP	LN.	INFO	.:					,	WO 2	003-	IB61	9		A 2	0030	220
OTHER	R SC	OURCE	(S):			CAS	REAC	T 14	1:22	5770	; MA	RPAT	141	:225	770			
GI			. ,								•							

AB Certain derivs. of aza-sugars I, wherein A is H, alkyl, alkenyl, alkynyl; X-G is CO, CH2; R is H, alkyl, acyl, aryl, aralkyl, trimethylsilyl; Y is O, NH, heterocycle; P is alkyl, CF3, aryl, aralkyl, alkylamino, heterocycle, useful in the treatment of cancer, are presented. This invention also relates to pharmacol. compns. containing the compds. of present invention and treatment of cancer, including tumor or other neoplasm, with an aza-sugar. Thus, 2,3,4-tri-O-benzyl-6-O-(4,6-dichloro-1,3,5-triazin-1-yl)-N-propyl-D-gluco-6-lactam was prepared and tested in vitro as antitumor agent.

IT 748814-76-8P

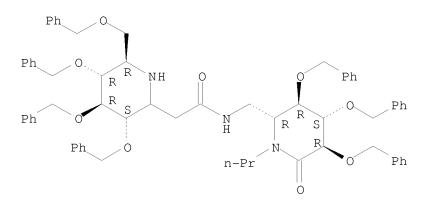
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of of azasugar derivs. as anticancer agents)

RN 748814-76-8 CAPLUS

CN 2-Piperidineacetamide, N-[[(2R,3R,4S,5R)-6-oxo-3,4,5-tris(phenylmethoxy)-1-propyl-2-piperidinyl]methyl]-3,4,5-tris(phenylmethoxy)-6-[(phenylmethoxy)methyl]-, (3S,4R,5R,6R)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel angiogenesis

inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GΙ

PA	TENT :	NO.			KIND DATE				APPLICATION NO.						DATE		
	2003 2003				A2 A3		2003 2003		,	WO 2	003-	US21	05		2	0030	124
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							DK,										
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,		
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,		
		UA, UG, US				VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	
US	US 20050038071						2005	0217		US 2	004-	5020	80		2	0041	800
PRIORIT	Y APP	LN.	INFO	.:						US 2	002-	3518	80P		P 2	0020	125
									•	WO 2	003-	US21	05	1	W 2	0030	124
OTHER S	OURCE	(S):			MAR:	PAT	139:	1498	04								

$$R1$$
 $R2$
 $R1$
 $R2$
 $R1$
 $R2$
 $R1$
 $R2$

409061-00-3P 409061-29-6P 409061-33-2P

409061-34-3P 571186-34-0P

AΒ The present invention relates to solenopsin A and its analogs, I [R1, R2 = linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (\pm) -Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et2O followed by addition of C1CO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et2O and treatment with HCl(g). The anticancer activity of $I \cdot HCl$ [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth inhibition at 1, 3 and 6 $\mu g/mL)\,.$ 32778-77-1DP, Solenopsin B, analogs 63950-17-4P, (±)-Solenopsin A hydrochloride 175478-17-8P 409060-79-3P 409060-81-7P 409060-82-8P 409060-83-9P 409060-85-1P 409060-86-2P 409060-87-3P 409060-88-4P 409060-89-5P 409060-90-8P 409060-91-9P 409060-92-0P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of solenopsin A, B and analogs as novel angiogenesis inhibitors)

RN 32778-77-1 CAPLUS

CN Piperidine, 2-methyl-6-tridecyl-, (2R,6R)- (CA INDEX NAME)

Absolute stereochemistry.

Me
$$\stackrel{\text{H}}{\text{N}}$$
 $\stackrel{\text{(CH2)}}{\text{12}}$ $\stackrel{\text{Me}}{\text{Me}}$

RN 63950-17-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, hydrochloride, (2R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 175478-17-8 CAPLUS

CN Piperidine, 2-methyl-6-propyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS

CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-81-7 CAPLUS
CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS
CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-83-9 CAPLUS CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS
CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-90-8 CAPLUS CN 2-Piperidinepropanoic acid, 6-methyl-, ethyl ester, hydrochloride (1:1), (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-91-9 CAPLUS
CN 2-Propenoic acid, 3-[(2R,6S)-6-methyl-2-piperidinyl]-, ethyl ester, hydrochloride (1:1), rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409061-00-3 CAPLUS CN Piperidine, 2-methyl-6-pentyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME) Relative stereochemistry.

● HCl

RN 409061-29-6 CAPLUS
CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS
CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

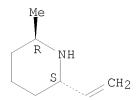
RN 409061-34-3 CAPLUS CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 571186-34-0 CAPLUS

CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



● HCl

L29 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:816108 CAPLUS

DOCUMENT NUMBER: 130:66389

TITLE: Preparation of indole derivatives as gonadotropin

releasing hormone antagonists

INVENTOR(S): Goulet, Mark; Chu, Lin; Walsh, Thomas F.; Fisher,

Michael H.; Girotra, Narindar N.; Wyvratt, Matthew J.;

Lin, Peter; Ashton, Wallace T.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 59 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5849764	A	19981215	US 1996-760817	19961205
PRIORITY APPLN. INFO.:			US 1996-760817	19961205
OTHER SOURCE(S):	MARPAT	130:66389		

GΙ

AΒ The title compds. I [A = (halo)alkyl, (un)substituted cycloalkyl, alkenyl, or alkynyl, alkoxy, alkylthio, alkoxyalkyl, bond, etc.; R0 = H, (un) substituted alkyl, aryl, or aralkyl; R1 = various (un) substituted heterocycles; R2 = H, (un)substituted alkyl, aralkyl, aryl, etc.; R2 and A may form 5- to 7-atom ring; R3, R4, R5 = H, (un)substituted alkyl or alkenyl, cyano, nitro, halo; R6 = H, (un)substituted alkyl, aryl, cyano, NO2, halo, etc.; R7 = H, (un)substituted alkyl, or is absent; R8 = H, CO2H or derivs., NH2 or derivs., OH or SH or derivs., etc.; or R7 and R8 form a C3-7 carbocyclic ring; R9, R9', R10, R10' = H, (un)substituted alkyl, aryl, or aralkyl; X = H, halo, N, O, S(O)0-2, CO, CH2, etc.; m = 0-3] (claimed) and similar compds. were prepared as antagonists of gonadotropin releasing hormone (no data). The compds. are thus useful for treatment of a variety of conditions including hormone-dependent cancers, benign prostatic hypertrophy, endometriosis, irritable bowel syndrome, etc. For instance, amidation of 3-(1H-indol-5-yl)propionic acid with 2-[2-(3,4-dimethoxyphenyl)-1H-indol-3-yl]ethylamine using EDC and HOBT, and reduction of the amide product to a secondary amine using LiAlH4 in THF at 77°, gave the invention compound II.

ΙI

IT 192717-09-2P 192717-10-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. as gonadotropin releasing hormone antagonists)

RN 192717-09-2 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & Me \\ \hline Me \\ \hline Me \\ \hline CH_2 \\ \hline O Me \\ \hline \end{array}$$

RN 192717-10-5 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(3-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:511777 CAPLUS

DOCUMENT NUMBER: 127:121742

ORIGINAL REFERENCE NO.: 127:23485a,23488a

TITLE: Preparation of heterocyclic compounds as antagonists

of gonadotropin releasing hormone

INVENTOR(S): Goulet, Mark; Ashton, Wallace T.; Chu, Lin; Fisher,

Michael H.; Girotra, Narindar N.; Lin, Peter; Wyvratt,

Matthew J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Goulet, Mark; Ashton, Wallace

T.; Chu, Lin; Fisher, Michael H.; Girotra, Narindar

N.; Lin, Peter; Wyvratt, Matthew J.

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: En FAMILY ACC. NUM. COUNT: 4 English

PATENT INFORMATION:

							DATE										
							1997										
	W:	AL,	AM,	ΑU,	AZ,	ВА	, BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,
							, KZ,										
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	RW:						, UG,										
							PT,										
		MR,	NE,	SN,	TD,	ΤG											
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ΑU	7076	41			В2		1999	0715									
							1998			EP 1	996-	9442	49		1	9961	210
							2002										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	PT,	ΙE,
CN	1208	412			А		1999 1999 2001	0217		CN 1	996-	1998	72		1	9961	210
JP	1150	6471			T		1999	0608		JP 1	997-	5221	24		1	9961	210
JP	3230	818			В2		2001	1119									
JP	2001	1066	85		Α		2001	0417		JP 2	000-	2577	91		1	9961	210
HU	9903	671			A2		2001	1028		HU 1	999-	3671			1	9961	210
	9903				А3		2001	1128									
ΑT	2150	81			${ m T}$		2002	0415		AT 1	996-	9442	49		1	9961	210
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							1997										
NO	9802	729			Α		1998	0813		NO 1	998-	2729			1	9980	612
RIT	Y APP	LN.	INFO	.:						US 1	995-	8633	P		P 1	9951	214
											996-						
											997-						
										WO 1	996-	US19	444	,	W 1	9961	210
IR SC	ALIBUE.	191.			MADI	TAC	127.	1217.	12								

OTHER SOURCE(S): MARPAT 127:121742

GI

$$R^{8}$$
 R^{7}
 R^{8}
 R^{2}
 R^{20}
 R^{10}
 R^{10

Me

AB The title compds. I [A = alkyl, etc.; R = H, alkyl, etc.; R1 = heterocyclic ring (generic structures given); R2 = H, alkyl, etc.; or R2A = ring; R3, R4, R5 = H, (un)substituted alkyl, alkenyl, etc.; or R3R4 = ring; R6 = H, (un)substituted alkyl, etc.; R7 = H, (un)substituted alkyl; unless X is hydrogen or halo, then R7 is absent; R8 = heterocyclic ring, etc.; or R7R8 = heterocyclic ring; R9, R19 = H, (un)substituted alkyl; further details on R9R19 and R9A are given; R20, R10 = H, (un)substituted alkyl, etc.; further details on R20R10, and R9R20, R9R2, R20R2, R20A are given; m = 0 to 3; X = N, etc.], useful as antagonists of gonadotropin releasing hormone (no data), are prepared I may be useful for the treatment of a variety of sex-hormone related and other conditions in both men and women. The title compound II was prepared in a multistep process.

II 192644-63-6P 192644-64-7P

ΙI

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as antagonists of gonadotropin releasing hormone)

RN 192644-63-6 CAPLUS

CN 1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]-1H-indol-5-yl]-2-methyl(CA INDEX NAME)

RN 192644-64-7 CAPLUS

CN 1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3[[6-[3-(3-pyridinyl)propyl]-2-piperidinyl]methyl]-1H-indol-5-yl]-2-methyl(CA INDEX NAME)

L29 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:313379 CAPLUS

DOCUMENT NUMBER: 125:75406

ORIGINAL REFERENCE NO.: 125:14067a,14070a

TITLE: Assessment of a cytoprotection assay for the discovery

and evaluation of anti-human immunodeficiency virus compounds utilizing a genetically-impaired virus

AUTHOR(S): Kiser, Rebecca; Makovsky, Susan; Terpening, Sara J.;

Laing, Noel; Clanton, David J.

CORPORATE SOURCE: NCI-AIDS Drug Screening and Development Laboratory,

SAIC-Frederick, NCI-FCRDC, Frederick, MD, 21702-1201,

USA

SOURCE: Journal of Virological Methods (1996), 58(1,2), 99-109

CODEN: JVMEDH; ISSN: 0166-0934

PUBLISHER: Elsevier DOCUMENT TYPE: Journal

LANGUAGE: English

AB A biol. contained cytoprotection assay was developed to screen inhibitors of the human immunodeficiency virus without the need for high level containment or practices. The virus used has multiple point mutations that have destroyed its ability to produce both Rev and Tat, proteins essential for virus replication in vitro. The original cell line employed (CEM-SSTART) contains a genetic construct that allows for the continuous expression of both Rev and Tat, and a subclone (1A2) was developed that provides for maximum acute cytopathic effect. The National Cancer Institute's AIDS drug screening assay was used to test known drugs with both HIVIIIB virus in the T4 lymphocytic cell line CEM-SS and mutant virus in the 1A2 subclone. This cell-based assay uses the tetrazolium salt, XTT, as an indicator of cellular metabolism after the cells have been infected with virus. The results of extensive testing have shown that the assay using mutant virus is comparable to the current NCI AIDS drug screen. After 42 days in 1A2 or CEM-SS cell culture, the virus or the integrated genome did not revert to wild-type, and the virus produced in 1A2 cells was unable to replicate in PBMCs. Mutant viral stocks were devoid of wild-type virus as determined by a PCR assay that would have found 60-600 copies of mutant RNA. These materials, which are now available to the scientific community (NIH AIDS Research and Reference Reagent Program), should be useful tools to screen and test compds. for potential inhibition of HIV in labs. not equipped to maintain and use wild-type infectious virus. ΙT 137893-48-2, Michellamine B

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(assessment of cytoprotection assay for discovery and evaluation of anti-human immunodeficiency virus compds. utilizing a genetically-impaired virus)

RN 137893-48-2 CAPLUS

CN 6,8-Isoquinolinediol, 5,5'-(1,1'-dihydroxy-8,8'-dimethoxy-6,6'-dimethyl[2,2'-binaphthalene]-4,4'-diyl)bis[1,2,3,4-tetrahydro-1,3-dimethyl-, (1R,1'R,3R,3'R,5R,5'S)- (CA INDEX NAME)

L29 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:93870 CAPLUS

DOCUMENT NUMBER: 118:93870

ORIGINAL REFERENCE NO.: 118:16213a, 16216a

In vitro screening of crude extracts and pure TITLE.

metabolites obtained from marine invertebrates for the

treatment of breast cancer

AUTHOR(S):

Stingl, John; Andersen, Raymond J.; Emerman, Joanne T. Dep. Anat., Univ. British Columbia, Vancouver, BC, V6T CORPORATE SOURCE:

1Z3, Can.

SOURCE: Cancer Chemotherapy and Pharmacology (1992), 30(5),

401 - 6

CODEN: CCPHDZ; ISSN: 0344-5704

DOCUMENT TYPE: Journal LANGUAGE: English

A total of 15 samples (crude exts. and pure secondary metabolites) obtained from marine invertebrates collected from the offshore waters of British Columbia, Papua New Guinea, and Sri Lanka have previously been shown to exert cytotoxic activity in the in vitro L1210 leukemic bioassay. The authors screened these metabolites for the vitro cytotoxic activity against the drug-sensitive breast-tumor cell lines MCF-7, T-47D, ZR-75-1, and MDA-MB-231; the multidrug-resistant and P-glycoprotein (Pgp)-pos. breast-tumor cell lines MCF-7 Adr and MDA-Alr; and normal and malignant human breast epithelial cells (HBEC) in primary culture. Eight samples exhibited significant [drug concentration resulting in a 50% decrease in cell growth as compared with controls (ED50), $<25 \mu g/mL$] dose-dependent cytotoxicity against the drug-sensitive cell lines; the ED50 values were as low as $0.004 \mu g/mL$. Five of the eight samples exhibited significant cytotoxicity against the multidrug-resistant cell lines; the ED50 values were as low as 0.0006 $\mu g/mL$. Incubation of MCF-7 Adr cells with varying concns. of compds. in the presence of Adriamycin demonstrated that none of the compds. tested interfered with Pgp function. Results obtained using HBEC in primary culture showed a wide range of chemosensitivities for a given drug against tissue taken from different patients, demonstrating the uniqueness of the response of different individuals to chemotherapy.

105372-70-1, Imbricatine ΤT

RL: BIOL (Biological study)

(breast cancer of humans inhibition by, multidrug resistance in relation to)

105372-70-1 CAPLUS RN

3-Isoquinolinecarboxylic acid, 5-[[5-[(2S)-2-amino-2-carboxyethyl]-1-CN methyl-1H-imidazol-4-yl]thio]-1,2,3,4-tetrahydro-6,8-dihydroxy-1-[(4hydroxyphenyl)methyl]-, (1R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

L29 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:27530 CAPLUS

DOCUMENT NUMBER: 70:27530
ORIGINAL REFERENCE NO.: 70:5139a,5142a

TITLE: Antitumor activity of isoquinoline derivatives. III.

Relation between toxicity and chemical constitution of

isoquinoline derivatives

AUTHOR(S): Arai, Yoshihisa; Enomoto, Kingo

CORPORATE SOURCE: Tanabe Seiyaku Co., Ltd., Toda, Japan SOURCE: Yakuqaku Zasshi (1968), 88(9), 1197-207

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal LANGUAGE: Japanese

Isoquinoline derivs. were classified into 5 types according to the substituents at position 1, and the relations between chemical structure and toxicity were studied. The LD50 decreased with increasing hydrogenation of the isoquinoline ring. In 1-alkyl-substituted isoquinoline derivs., the LD50 increased as the degree of branching of the 1-alkyl residue increased. Pathol. changes were caused by almost all 1-alkyl-substituted compds., especially those with a tert-alkyl residue. In the case of 1-aryl-and 1-aralkyl-substituted compds., liver swelling depended on the simultaneous presence of the methylenedioxy residues at the 3',4'-positions of the terminal phenyl residue of the substituent and at the 6,7-positions of the isoquinoline ring. However, no pathol. change was observed with 1-(2-methylbutyl)-3-methyl-6,7-(methylenedioxy)isoquinoline-HCl or 1-neopentyl-3-methyl-6,7-(methylenedioxy)-isoquinoline-HCl. These compds. showed a marked inhibitory action on exptl. tumors. Compds. possessing a methylene residue between C-1 of the isoquinoline ring and a sec- or tertalkyl residue in the 1-alkyl substituent may have antitumor activity with few side effects.

IT 20233-00-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(neoplasm inhibiting activity of)

RN 20233-00-5 CAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinoline, 5-(1,1-dimethylpentyl)-5,6,7,8-tetrahydro-7-methyl-, hydrochloride (8CI) (CA INDEX NAME)

● HCl

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L34 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1066867 CAPLUS

DOCUMENT NUMBER: 145:419118

TITLE: Substituted thienopyridines and related compounds and

their preparation, pharmaceutical compositions, and use as CHK1, PDK1 and PAK inhibitors in the treatment

of cancer

INVENTOR(S): Daly, Kevin; Heron, Nicola; Hird, Alexander;

> Ioannidis, Stephanos; Janetka, James Walter; Lyne, Paul; Scott, Jamie; Toader, Dorin; Vasbinder, Melissa; Yu, Dingwei; Yu, Yan

Astrazeneca AB, Swed.; Astrazeneca UK Limited PCT Int. Appl., 164pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 145:419118

GΙ

This invention relates to compds. of formula I and to their pharmaceutical AΒ compns. and to their methods of use. These compds. possess CHK1 kinase inhibitory activity, PDK1 inhibitory activity and Pak kinase inhibitory activity and are accordingly useful in the treatment and/or prophylaxis of cancer. Compds. of formula I wherein dotted lines are single and double bond; A and D are independently N, CH, S, O and NH and derivs.; L is NH, O and S; X and Y are independently N and CH; R1 is CN, halo, C1-6 alkyl(oxy), NH2 and derivs., C2-6 alkenyl, C2-6 alkynyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, etc.; R2 is C1-3 alkyl-NH2 and derivs., 4- to 7-membered heterocyclyl, CO-carbocyclyl, CO-heterocyclyl, etc.; R3 is H, Bn, C1-6 alkyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, OH and derivs., CHO, etc.; and their pharmaceutically acceptable salts are claimed. Example compound II was prepared by condensation of 2-thienylacetonitrile with glyoxylic acid monohydrate; the resulting (2Z)-3-cyano-3-(2-thienyl)acrylic acid underwent chlorination to give the corresponding acid chloride, which underwent substitution with sodium azide to give the acryloyl azide derivative, which underwent cyclization to give 4-oxo-4,5-dihydrothieno[3,2-c]pyridine-7-carbonitrile, which underwent bromination to give 2-bromo-4-oxo-4,5-dihydrothieno[3,2c]pyridine-7-carbonitrile, which underwent chlorination to give 2-bromo-4-chlorothieno[3,2-c]pyridine-7-carbonitrile, which underwent amination with tert-Bu (3S)-3-aminopiperidine-1-carboxylate to give tert-Bu (3S)-3-[(7-cyano-2-bromothieno[3,2-c]pyridin-4-yl)amino]piperidine-1-carboxylate, which underwent cross-coupling with phenylboronic acid to qive (3S)-3-[(7-cyano-2-phenylthieno[3,2-c]pyridin-4-yl)amino]piperidine-1carboxylate, which underwent hydrolysis to give compound II. All the invention compound were evaluated for their CHK1, PDK1 and PAK inhibitory activity (no data).

IT 912367-52-3P 912367-53-4P 912367-54-5P 912367-55-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of substituted thienopyridines and related compds. and their use as CHK1, PDK1 and PAK inhibitors in the treatment of cancer)

RN 912367-52-3 CAPLUS

CN Thieno[3,2-c]pyridine-7-carboxamide, 4-[(2,6-dimethyl-3-piperidinyl)amino]-2-phenyl- (CA INDEX NAME)

RN 912367-53-4 CAPLUS

CN Thieno[3,2-c]pyridine-7-carboxamide, 4-[(2,6-dimethyl-3-piperidinyl)amino]-2-(4-fluorophenyl)- (CA INDEX NAME)

RN 912367-54-5 CAPLUS

CN Thieno[3,2-c]pyridine-7-carboxamide, 4-[(2,6-dimethyl-3-piperidinyl)amino]-2-(3-fluorophenyl)- (CA INDEX NAME)

RN 912367-55-6 CAPLUS

CN Thieno[3,2-c]pyridine-7-carboxamide, 4-[(2,6-dimethyl-3-piperidinyl)amino]-2-(3-thienyl)- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel angiogenesis

inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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PRIORITY APPLN. INFO.:
                                           US 2002-351880P
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                                           WO 2003-US2105
                       MARPAT 139:149804
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OTHER SOURCE(S): GΙ

Ι

TT

AΒ The present invention relates to solenopsin A and its analogs, I [R1, R2 = linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (\pm) -Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et20 followed by addition of C1CO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et2O and treatment with HCl(g). The anticancer activity of I·HCl [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth inhibition at 1, 3 and 6 μ g/mL). 32778-77-1DP, Solenopsin B, analogs 63950-17-4P, (±)-Solenopsin A hydrochloride 175478-17-8P 409060-79-3P 409060-81-7P 409060-82-8P 409060-83-9P 409060-85-1P 409060-86-2P 409060-87-3P 409060-88-4P 409060-89-5P 409060-90-8P 409060-91-9P 409060-92-0P 409061-00-3P 409061-29-6P 409061-33-2P 409061-34-3P 571186-34-0P

(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN

(preparation of solenopsin A, B and analogs as novel angiogenesis

inhibitors)
RN 32778-77-1 CAPLUS
CN Piperidine, 2-methyl-6-tridecyl-, (2R,6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 63950-17-4 CAPLUS CN Piperidine, 2-methyl-6-undecyl-, hydrochloride, (2R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 175478-17-8 CAPLUS CN Piperidine, 2-methyl-6-propyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS
CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-81-7 CAPLUS
CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS
CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-83-9 CAPLUS CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS
CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-90-8 CAPLUS CN 2-Piperidinepropanoic acid, 6-methyl-, ethyl ester, hydrochloride (1:1), (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-91-9 CAPLUS
CN 2-Propenoic acid, 3-[(2R,6S)-6-methyl-2-piperidinyl]-, ethyl ester, hydrochloride (1:1), rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409061-00-3 CAPLUS CN Piperidine, 2-methyl-6-pentyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME) Relative stereochemistry.

● HCl

RN 409061-29-6 CAPLUS
CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS
CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

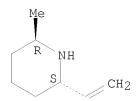
● HCl

RN 409061-34-3 CAPLUS CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 571186-34-0 CAPLUS
CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



● HCl

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         3706 PIPERIDINES
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DALL ----- ALL, delimited (end of each field identified)
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MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
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IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels
SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
HIT ----- Fields containing hit terms
HITIND ---- IC, ICA, ICI, NCL, CC and index field (ST and IT)
             containing hit terms
\hbox{HITRN $-----$ HIT RN and its text modification}\\
HITSTR ----- HIT RN, its text modification, its CA index name, and
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HITSEQ ----- HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and

its structure diagram

FHITSEQ ---- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields

KWIC ----- Hit term plus 20 words on either side

OCC ----- Number of occurrence of hit term and field in which it occurs

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- L35 ANSWER 1 OF 64021 CAPLUS COPYRIGHT 2008 ACS on STN
- 2008:978596 CAPLUS ΑN
- TΤ Oxidation of 2-substituted pyrrolidines and piperidines as nicotine analogues
- Moerhle, Hans; Berlitz, Johannes ΑU
- Institut fuer Pharmazeutische und Medizinische Chemie, CS Heinrich-Heine-Universitaet, Duesseldorf, 40225, Germany
- Zeitschrift fuer Naturforschung, B: Chemical Sciences (2008), 63(8), SO 985-992 CODEN: ZNBSEN; ISSN: 0932-0776
- PΒ Verlag der Zeitschrift fuer Naturforschung
- DT Journal
- LA German

=> file reg COST IN U.S. DOLLARS

FULL ESTIMATED COST

CA SUBSCRIBER PRICE

SINCE FILE TOTAL ENTRY SESSION 3.81 1129.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 -47.20

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experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s piperidine L36 556824 PIPERIDINE

=> d rsd

L36 ANSWER 1 OF 556824 REGISTRY COPYRIGHT 2008 ACS on STN

Ring System Data

Elementa	l Elementa	l Size of	Ring Syste	m Ring	RID
Analysis	Sequence	the Ring	s Formula	Identifie	r Occurrence
EA	ES	SZ	RF	RID	Count
======	=+======	=+======	=+=======	=+======	=+=======
C6	C6	16	C6	46.150.18	2
C5N	NC5	16	C5N	46.156.1	1

=> s 46.150.18/rid SYSTEM LIMITS EXCEEDED - SEARCH ENDED

The search profile you entered was too complex or gave too many answers. Simplify or subdivide the query and try again. If you have exceeded the answer limit, enter DELETE HISTORY at an arrow prompt (=>) to remove all previous answers sets and begin at L1. Use the SAVE command to store any important profiles or answer sets before using DELETE HISTORY.

=> s 46.156.1/rid L37 1442478 46.156.1/RID

CA SUBSCRIBER PRICE

=> file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

ENTRY SESSION
12.12 1141.23

SINCE FILE TOTAL
ENTRY SESSION
0.00 -47.20

TOTAL

SINCE FILE

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FILE COVERS 1907 - 18 Aug 2008 VOL 149 ISS 8

FILE LAST UPDATED: 17 Aug 2008 (20080817/ED)

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=> s 137

TOO MANY TERMS FOR FILE CROSSOVER IN L37

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> s L37 AND cancer

TOO MANY TERMS FOR FILE CROSSOVER IN L37

There are limits on the size of an answer set being crossed over from one file to another. Enter HELP CROSSOVER at an arrow prompt (=>) for specific information.

=> file req

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 1.92 1143.15

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 -47.20

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http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\STNEXP\Queries\10502080 Broad3.str

STRUCTURE UPLOADED L38

=> s sub=L38 SAM L37

SUBSET AND SAMPLE ARE IGNORED FOR THIS SEARCH L39 1442478 46.156.1/RID

=> s 138

SAMPLE SEARCH INITIATED 14:32:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 18600 TO ITERATE

10.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 363833 TO 380167

PROJECTED ANSWERS: 818 TO 1786

L40 7 SEA SSS SAM L38

=> s 138 sss sam

SAMPLE SEARCH INITIATED 14:32:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 18600 TO ITERATE

10.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

7 ANSWERS

7 ANSWERS

PROJECTED ITERATIONS: 363833 TO 380167 PROJECTED ANSWERS: 818 TO 1786

L41 7 SEA SSS SAM L38

=> s 138 sss full

FULL SEARCH INITIATED 14:33:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 372862 TO ITERATE

100.0% PROCESSED 372862 ITERATIONS 1075 ANSWERS

SEARCH TIME: 00.00.01

L42 1075 SEA SSS FUL L38

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
184.43
1327.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
CA SUBSCRIBER PRICE

0.00
-47.20

FILE 'CAPLUS' ENTERED AT 14:33:12 ON 18 AUG 2008
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FILE COVERS 1907 - 18 Aug 2008 VOL 149 ISS 8 FILE LAST UPDATED: 17 Aug 2008 (20080817/ED)

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=> s 142

L43 1413 L42

=> s 143 and (cancer OR "Cancer (genus)")

370638 CANCER

54465 CANCERS

384282 CANCER

(CANCER OR CANCERS)

370638 "CANCER"

54465 "CANCERS"

384282 "CANCER"

("CANCER" OR "CANCERS")

53989 "GENUS"

103 "GENUSES"

18740 "GENERA"

8 "GENERAS"

68072 "GENUS"

("GENUS" OR "GENUSES" OR "GENERA" OR "GENERAS")

48 "CANCER (GENUS)"

("CANCER"(W)"GENUS")

L44 22 L43 AND (CANCER OR "CANCER (GENUS)")

=> d L44 10-15 ibib abs hitstr

L44 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:53048 CAPLUS

DOCUMENT NUMBER: 144:128869

TITLE: Preparation of N-(2-oxoazepan-3-y1) sulfonamides as

y-secretase inhibitors for treating Alzheimer's

disease and cancers

INVENTOR(S): Galley, Guido; Kitas, Eric, Argirios; Jakob-Roetne,

Roland

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006005486	A1	20060119	WO 2005-EP7268	20050706
W: AE, AG,	AL, AM, AT	, AU, AZ, BA	A, BB, BG, BR, BW, 1	BY, BZ, CA, CH,
CN, CO,	CR, CU, CZ	, DE, DK, DM	M, DZ, EC, EE, EG, 1	ES, FI, GB, GD,
GE, GH,	GM, HR, HU	, ID, IL, IN	N, IS, JP, KE, KG, 1	KM, KP, KR, KZ,

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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU 2005261932
                                 20060119
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                                                                     20050706
                          Α1
     CA 2573372
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                           Α1
                                 20070404
                                             EP 2005-754795
     EP 1768960
                          Α1
                                                                     20050706
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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                                 20070912
     CN 101035765
                                             CN 2005-80023701
                          Α
                                                                     20050706
     JP 2008505948
                           Τ
                                             JP 2007-520712
                                 20080228
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     BR 2005013379
                                 20080506
                                             BR 2005-13379
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                           Α
     US 20060014945
                                             US 2005-179703
                                 20060119
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     US 7253158
                           В2
                                 20070807
                                 20070824
                                             IN 2007-CN123
                                                                     20070111
     IN 2007CN00123
                          Α
     MX 200700468
                           Α
                                 20070308
                                             MX 2007-468
                                                                     20070112
PRIORITY APPLN. INFO.:
                                             EP 2004-103339
                                                                     20040713
                                             WO 2005-EP7268
                                                                  W
                                                                     20050706
```

OTHER SOURCE(S): MARPAT 144:128869

GΙ

AΒ Title compds. I [R1 = (un)substituted hetero/aryl; R2-R4, R2'-R4' = H, lower alkyl, Ph or lower alkyl substituted by halogen; R5 = cycloalkyl, (un) substituted hetero/aryl; X = CHR; R = H, lower alkyl; and their pharmaceutically suitable acid addition salts, optical pure enantiomers, racemates or diastereomeric] were prepared as γ -secretase inhibitors. Thus, reductive amination of 3-fluoro-p-anisaldehyde with 3-aminoazepan-2-one and reaction with 5-chlorothiophene-2-sulfonyl chloride gave sulfonamide II. Preferred I inhibited γ -secretase with IC50 < 0.3 μM . I are useful in the treatment of Alzheimer's disease or common cancers.

ΙI

IT504-03-0, 2,6-Dimethylpiperidine RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of N-(2-oxoazepan-3-yl)sulfonamides as γ -secretase inhibitors for treating Alzheimer's disease and cancers)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:71602 CAPLUS

DOCUMENT NUMBER: 142:316675

TITLE: Optimization of 6,7-Disubstituted-4-

(arylamino)quinoline-3-carbonitriles as Orally Active,

Irreversible Inhibitors of Human Epidermal Growth

Factor Receptor-2 Kinase Activity

AUTHOR(S): Tsou, Hwei-Ru; Overbeek-Klumpers, Elsebe G.; Hallett,

William A.; Reich, Marvin F.; Floyd, M. Brawner; Johnson, Bernard D.; Michalak, Ronald S.; Nilakantan,

Ramaswamy; Discafani, Carolyn; Golas, Jonathan;

Rabindran, Sridhar K.; Shen, Ru; Shi, Xiaoqing; Wang,

Yu-Fen; Upeslacis, Janis; Wissner, Allan

CORPORATE SOURCE: Chemical and Screening Sciences, Chemical Development,

and Oncology, Wyeth Research, Pearl River, NY, 10965,

USA

SOURCE: Journal of Medicinal Chemistry (2005), 48(4),

1107-1131

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:316675

GΙ

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{2}
 R^{3}
 R^{2}
 R^{3}
 R^{4}

AB A series of new 6,7-disubstituted-4-(arylamino)quinoline-3-carbonitriles, e.g. I (R1 = H, C1; R2 = PhCH2O, 1-imidazolyl, 2-furylmethoxy, etc.; R3 =

Ι

Cl, CN, PhCH2O; R4 = Me, Et; R5 = Me, R6 = Me, HOCH2CH2; R5R6N = azetidinyl, piperidinyl, thiomorpholinyl, etc.) that function as irreversible inhibitors of human epidermal growth factor receptor-2 (HER-2) and epidermal growth factor receptor (EGFR) kinases have been prepared These compds. demonstrated enhanced activities for inhibiting HER-2 kinase and the growth of HER-2 pos. cells compared to the EGFR kinase inhibitor I [R1 = H; R2 = F; R3 = C1; R4 = Et; R5 = R6 = Me;(EKB-569)]. Three synthetic routes were used to prepare these compds. were prepared mostly by acylation of 6-amino-4-(arylamino)quinoline-3carbonitriles with unsatd. acid chlorides or by amination of 4-chloro-6-(crotonamido)quinoline-3-carbonitriles with monocyclic or bicyclic anilines. The third route was developed to prepare a key intermediate, 6-acetamido-4-chloroquinoline-3-carbonitrile, that involved a safer cyclization step. It was shown that attaching a large lipophilic group at the para position of the 4-(arylamino) ring results in improved potency for inhibiting HER-2 kinase. The importance of a basic dialkylamino group at the end of the Michael acceptor for activity, due to intramol. catalysis of the Michael addition has also been demonstrated. This, along with improved water solubility, resulted in compds. with enhanced biol. properties. The mol. modeling results consistent with the proposed mechanism of inhibition are presented. Binding studies of one compound, I [R1 = H; R2 = 2-pyridylmethoxy; R3 = C1; R4 = Et; R5 = R6 = Me; (HKI-272)](C-14 radiolabeled), showed that it binds irreversibly to HER-2 protein in BT474 cells. Furthermore, it demonstrated excellent oral activity, especially in HER-2 overexpressing xenografts. Compound HKI-272 was selected for further studies and is currently in phase I clin. trials for the treatment of cancer.

IT 766-17-6, cis-2,6-Dimethylpiperidine

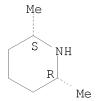
RL: RCT (Reactant); RACT (Reactant or reagent)

(N-alkylation; preparation of disubstituted (arylamino)quinolinecarbonitrile s as orally active, irreversible inhibitors of human epidermal growth factor receptor-2 kinase activity and antitumor agents)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel angiogenesis

inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

F	PATENT NO.						KIND DATE				APPL	ICAT	ION 1	NO.		D	ATE	
	VO 20					A2 A3		2003 2003		,	WO 2	003-	US21	05		2	0030	124
	M	7 :	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS, LT, LU,			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,	
		PL, PT, RO,			RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	F	₹W:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
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			ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	
Ţ	US 20050038071					A1		2005	0217		US 2	004-	5020	80		2	0041	800
PRIORI	PRIORITY APPLN. INFO.:									US 2	002-	3518	80P		P 2	0020	125	
								WO 2003-US2105			1	W 2	0030	124				
OHITED	0011	\a	~ \			3 6 7 7		100	1 100	0.4								

OTHER SOURCE(S): GI

MARPAT 139:149804

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}

AΒ The present invention relates to solenopsin A and its analogs, I [R1, R2 = linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (\pm) -Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et20 followed by addition of C1CO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et2O and treatment with HCl(q). The anticancer activity of $I \cdot HCl$ [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth inhibition at 1, 3 and 6 $\mu g/mL)\,.$

32778-77-1DP, Solenopsin B, analogs 63950-17-4P,
(±)-Solenopsin A hydrochloride 175478-17-8P
409060-79-3P 409060-81-7P 409060-82-8P
409060-83-9P 409060-85-1P 409060-86-2P
409060-87-3P 409060-88-4P 409060-89-5P
409060-90-8P 409060-91-9P 409060-92-0P
409061-00-3P 409061-29-6P 409061-33-2P
409061-34-3P 571186-34-0P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);

PREP (Preparation); USES (Uses)
 (preparation of solenopsin A, B and analogs as novel angiogenesis inhibitors)
32778-77-1 CARLUS

RN 32778-77-1 CAPLUS

CN Piperidine, 2-methyl-6-tridecyl-, (2R,6R)- (CA INDEX NAME)

Absolute stereochemistry.

Me
$$\stackrel{\text{H}}{\text{N}}$$
 $\stackrel{\text{(CH2)}}{\text{12}}$ $\stackrel{\text{Me}}{\text{Me}}$

RN 63950-17-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, hydrochloride, (2R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 175478-17-8 CAPLUS
CN Piperidine, 2-methyl-6-propyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS
CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-81-7 CAPLUS
CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS
CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-83-9 CAPLUS CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS
CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-90-8 CAPLUS CN 2-Piperidinepropanoic acid, 6-methyl-, ethyl ester, hydrochloride (1:1), (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-91-9 CAPLUS
CN 2-Propenoic acid, 3-[(2R,6S)-6-methyl-2-piperidinyl]-, ethyl ester, hydrochloride (1:1), rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409061-00-3 CAPLUS CN Piperidine, 2-methyl-6-pentyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME) Relative stereochemistry.

● HCl

RN 409061-29-6 CAPLUS
CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS
CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

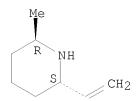
RN 409061-34-3 CAPLUS CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 571186-34-0 CAPLUS

CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



● HCl

L44 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:42245 CAPLUS

DOCUMENT NUMBER: 138:106689

TITLE: Preparation of thiazolylamino benzamide derivatives as

modulators of cell proliferation and inhibitors of

protein kinases

INVENTOR(S): Chu, Shao Song; Alegria, Larry Andrew; Bleckman, Ted

Michael; Chong, Wesley K. M.; Duvadie, Rohit K.; Li,

Lin; Reich, Siegfried H.; Romines, William H.;

Wallace, Michael B.; Yang, Yi

PATENT ASSIGNEE(S): Agouron Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 163 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.				KIN	D i	DATE			APPL	ICAT	ION :	NO.		D	ATE	
	2003 2003		-		A2 A3		 2003 2004		,	WO 2	002-	 US21	280		2	0020	 705
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            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
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PRIORITY APPLN. INFO.:
                                           US 2001-303679P
                                                              P 20010706
                                           US 2001-305274P
                                                             P 20010713
                                           WO 2002-US21280
                                                              W 20020705
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OTHER SOURCE(S): MARPAT 138:106689

$$R^{1}R^{2}N$$
 C
 NH_{2}
 C
 NH_{3}
 NH_{2}
 C
 C
 NH_{3}
 NH_{3}
 NH_{4}
 NH_{5}
 NH_{5}

AΒ Aminothiazole compds. with mono-/di-substituted benzamides (shown as I; variables described below; e.g. 4-[[4-amino-5-(2,6-difluorobenzoyl)thiazol-2-yl]amino]-N-(2-morpholin-4-ylethyl)benzamide), and their pharmaceutically acceptable salts, pharmaceutically acceptable prodrugs, pharmaceutically active metabolites, and pharmaceutically acceptable salts of said metabolites are described. These agents modulate and/or inhibit the cell proliferation and activity of protein kinases and are useful as pharmaceuticals for treating malignancies and other disorders. Inhibitory activities towards three cyclin complexes of protein kinases, phosphorylated FGF receptor and/or LCK tyrosine kinase and/or cytotoxicity towards the HCT-116 cancer cell line are reported for hundreds of I, many of which were prepared combinatorially. For I: R1 and R2 are each independently H, or an alkyl, alkenyl, alkynyl, heteroalkyl, alkoxy, aminoalkyl, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group unsubstituted or substituted with ≥1 substituents listed in the claims, or R1 or R2, together with the N-C(O) and two adjacent C atoms of the Ph ring of I, forms a 5- or 6-membered ring structure fused to the Ph ring of I and unsubstituted or substituted with ≥1 substituents listed in the claims, or R1 and R2, taken together with the N atom to which they are bonded, form a monocyclic or fused or nonfused polycyclic structure which may contain 1-3 addnl. heteroatoms, the structure being unsubstituted or substituted with ≥1 substituents listed in the claims. R3 is an aryl, heteroaryl, alkyl, or cycloalkyl group, unsubstituted or substituted with ≥1 substituents listed in the claims. Y is H, alkyl, heteroalkyl, haloalkyl, halocycloalkyl, haloheterocycloalkyl, cycloalkyl, heterocycloalkyl, -NO2, -NH2, -N-OH, N-ORc, -CN, -(CH2)z-CN (z is 0-4), halogen, -OH, -O-Ra-O-, -ORb, -CO-R, -O-CO-Rc, -CO-ORc, -O-CO-OR, -O-OR, =O, =S, -NRdRe, -CO-NRdRe, -O-CO-NRdRe, -NRc-CO-Re, -NR-CO-OR, -CO-NRc-CO-Rd, -O-SO2-Re, -O-SO-R, -O-S-Re, -S-CO-Rc, -SO-CO-ORc, -SO-CO-OR, -O-SO3, -NRc-SRd, -NRc-SO-Rd, NRc-SO2-Rd, -CO-SRc, -CO-SO-Re, -CO-OSO2-Rc, -CS-Rc, -CSO-R, -CSO2-R,, -NRc-CS-Rd, -O-CS-Re, -O-CSO-Rc, -O-SO2-Re, -OS2-NRdRe, -SO-NRdRe,

-S-NRdRe, -NRd-CSO2-Rd, -NRc-CSO-Rd, -NRc-CS-Rd, -SH, -S-Rb, and -PO2-ORc (Ra, etc. defined in claims). Although the methods of preparation are not claimed, .apprx.80 example prepns. of I are included and directions are given for combinatorial preparation of 396 I.

IT 766-17-6, cis-2,6-Dimethylpiperidine

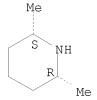
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of thiazolylamino benzamide derivs. as modulators of cell proliferation and inhibitors of protein kinases)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



L44 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:965133 CAPLUS

DOCUMENT NUMBER: 138:39277

TITLE: Preparation of N-thiazolyl-N'-pyridyl ureas as

antitumor agents

INVENTOR(S): Askew, Benny C.; De Morin, Frenel F.; Hague, Andrew;

Laber, Ellen; Li, Aiwen; Liu, Gang; Lopez, Patricia; Nomak, Rana; Santora, Vincent; Tegley, Christopher;

Yang, Kevin

PATENT ASSIGNEE(S): Amgen, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 129 pp., Cont.-in-part of U.S.

Ser. No. 930,753.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:	PATENT NO.					D	DATE		-	APPL	ICAT	ION 1	NO.		Di	ATE	
US	2002	0193	405		A1		2002	1219		US 2	002-	7712	4		2	0020	215
US	6645	990			В2		2003	1111									
US	2002	0173	507		A1		2002	1121		US 2	001-	9307.	53		2	0010	814
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ES	ES 2260277				Т3		2006	1101		ES 2	001-	9640	09		2	0010	815
CA	2476	411			A1		2003	0828	1	CA 2	003-	2476	411		2	0030	213
WO	2003	0707	27		A1 2003082				,	WO 2	003-1	JS45.	37		2	0030	213
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		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,
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     AU 2003215231
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                                             EP 2003-711046
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                                           JP 2003-569634
     JP 2006509715
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                                             US 2003-631423
                         A1
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     US 7196104
                         B2 20070327
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     MX 2004PA07970
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                         Α
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US 2000-225793P P 20000815

US 2001-930753 A2 20010814

EP 2001-964009 A3 20010815

US 2002-77124 A 20020215
PRIORITY APPLN. INFO.:
                                                                 W 20030213
                                              WO 2003-US4537
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OTHER SOURCE(S): MARPAT 138:39277

AB The title compds. [I; R15 = H, heterocyclyl, Ph, etc.; R16 = H, heterocyclylcarbonyl, alkylaminocarbonyl, etc.; R17 = halo, alkyl, cycloalkyl, etc.; provided only one of R15 and R16 = H] which are effective for prophylaxis and treatment of diseases, such as cell proliferation or apoptosis mediated diseases involving stroke, cancer and the like, were prepared Thus, heating 2-phenyl-4-thiazolylcarbonylazide with 6-(3-methylpiperidin-1-ylmethyl)pyridin-2-ylamine in PhMe afforded the urea I [R15 = 3-methylpiperidin-1-ylmethyl; R16 = H; R17 = Ph] which showed cdk2/cyclin and cdk5/p25 kinase activity with IC50 of < 0.5 μM .

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)

L44 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:428894 CAPLUS

DOCUMENT NUMBER: 137:20303

TITLE: Preparation of substituted quinolines as antitumor

agents

INVENTOR(S): Boyle, Francis Thomas; Gibson, Keith Hopkinson; Foote,

Kevin Michael

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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EP	1337	1337524			A1		2003	0827		EΡ	2001-	-9786	16			20013	026
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OTHER S	R SOURCE(S):					PAT	137:	20303	3								

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [n = 0 or 1; Y = NH, O, S, or alkylamine; R5 = CN, F, Cl,or Br; R6 = (un)substituted -cycloalkyl, -pyridinyl, -pyrimidinyl, -Ph, etc.; R1, R2 and R4 independently = H, OH, halo, CN, NO2, F3C, alkyl, amine, alkylamine, dialkylamine, R7X1(CH2)x- wherein x = 0-3, R7 = H, (un) substituted hydrocarbyl or heterocyclyl and X1 = O, CH2, OCO, CO, S, SO, SO2, NR8CO, NR8CO2, CONR9, CO2NR9, SO2NR10, NR11 or NR11NR11 wherein R8, R9, R10 and R11 independently = H, alkyl or alkoxyalkyl; R3 = group of formula X1R12(OH)p where p = 1-2 and R12 = alkylene, alkenylene or alkynylene chain, optionally interposed with a heteroatom or heterocyclic ring with the provision that when R12 = alkylene, R12 must be interposed with a heteroatom or heterocyclic ring and at least one (OH)p is on the alkylene chain between X1 and the interposed heteroatom or heterocyclic ring; group of formula R7(CH2)yX1(CH2)x where y = 0-5 and (CH2)y is optionally interposed by an X1 group; group of formula X1alkyl where alkyl is substituted by one or more Cl and/or CN; heterocyclic ring, etc.], or a pharmaceutically acceptable salt, pro-drug or solvate thereof are prepared and disclosed as antiproliferative agents. Thus, II was prepared in eight steps from benzylchloroformate and 2-methoxy-5-nitroaniline. I were evaluated as inhibitors of MAPK pathway and exhibited IC50 values

typically lest than 0.5 $\mu\text{M},$ e.g., II possessed an IC50 = 0.0013 $\mu\text{M}.$ In cell proliferation assays, I had IC50 results typically less than 30 μM with II giving an IC50 of 1.3 μM in HT29 human colon tumor

cells. Methods for prevention of cancer comprising

administering an effective amount of compound I are further claimed.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation, inhibition of MAP kinase, and cellular antiproliferation activity of substituted quinolines as antitumor agents)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d L44 16-20 ibib abs hitstr

L44 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:228866 CAPLUS

DOCUMENT NUMBER: 134:266317

TITLE: Preparation of quinazolines as aurora 2 kinase

inhibitors

INVENTOR(S): Mortlock, Andrew Austen; Keen, Nicholas John; Jung,

Frederic Henri; Brewster, Andrew George

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 306 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	FENT	NO.			KIND DATE				APPL	ICAT	ION 1	7O.		D	ATE		
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	$\mathrm{ML}_{m{\prime}}$	MR,	ΝE,	SN,	TD,	ΤG			
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-	P 2003509499 T 2003033						1 JP 2001-524975						2	0000	918		
EE	2002	0011						-	5 EE 2002-119						2	0000	918
HU	2003	0000	59		A2		2003	0728		HU 2	003-		20000918				

HU 2003000059	А3	20030828				
BG 106492	A	20030131	BG	2002-106492		20020307
IN 2002MN00293	A	20050318	IN	2002-MN293		20020308
ZA 2002002234	A	20030619	ZA	2002-2234		20020319
NO 2002001399	A	20020430	NO	2002-1399		20020320
PRIORITY APPLN. INFO.:			GB	1999-22154	A	19990921
			GB	1999-22170	A	19990921
			WO	2000-GB3580	W	20000918
			WO	2000-GB9100	A	20000918

Ι

OTHER SOURCE(S): MARPAT 134:266317

GΙ

Title compds. (I) [wherein X = O, S, SO, SO2, NH, or NR12; R12 = H or AΒ alkyl; R1-R4 = independently halo, CN, NO2, alkylsulfanyl, N(OH)R13, or R15X1; R13 = H or alkyl; X1 = a direct bond, O, CH2, OC(O), CO, CO2, S, SO, SO2, or (un) substituted NHCO, CONH, SO2NH, NHSO2, or NH; R15 = H or (un) substituted hydrocarbyl, heterocyclyl, or alkoxy; R5 = NHCO2R9, NHCOR9, NHSO2R9, COR9, CO2R9, SOR9, SO2OR9, CONR10R11, SONR10R11, or SO2NR10R11; R9-R11 = independently H or (un)substituted hydrocarbyl or heterocyclyl; or R10 and R11 together with the N to which they are attached = (un)substituted heterocyclyl; R6 = H or (un)substituted hydrocarbyl or heterocyclyl; R7 and R8 = independently H, halo, alkyl, (di)alkoxy(methyl), alkanoyl, CF3, CN, NHY2, alkenyl, alkynyl, or (un) substituted Ph, PhCH2, or heterocyclyl; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, a 7-step sequence involving (1) alkylation of morpholine with 1-bromo-3chloropropane (49%), (2) addition of Et vanillate to yield Et 3-methoxy-4-(3-morpholinopropoxy)benzoate (100%), (3) nitration (86%), (4) reduction to the amine using 10% Pd/C (100%), (5) cycloaddn. with formamide to form the quinazoline(68%), (6) chlorination to give 4-chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline (60%), and (7) amination with N-benzoyl-4-aminoaniline (58%) yielded II. The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration

ΙI

0.0193 $\mu\text{M}.$ In addition, II gave 50% inhibition of MCF-7 cell proliferation at 1.06 μM and reduced BrdU incorporation into cellular DNA by 50% at 0.159-0.209 $\mu\text{M}.$

IT 504-03-0, 2,6-Dimethyl-piperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:811245 CAPLUS

DOCUMENT NUMBER: 132:49976

TITLE: Preparation of pyrrolo[2,3-d]pyrimidines as inhibitors

of protein tyrosine kinases such as Janus Kinase 3

INVENTOR(S): Blumenkopf, Todd Andrew; Flanagan, Mark Edward; Brown,

Matthew Frank; Changelian, Paul Steven

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT	NO.			KIND DATE					APPL:	ICAT:	ION I	. OV		Di	ATE	
WO	9965	909			A1		1999:	1223		WO 1	999-	IB11:	10		1:	9990	614
	W:									BR,							
										GM,							
										LT,							
					•					SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,
		,	•	,	•	•	VN,	•									
	RW:				•					UG,				•			
					•		•	•	•	MC,	•	•	SE,	BF,	ВJ,	CF,	CG,
										SN,							
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	2000		-		Τ2					TR 2						9990	
	1087									EP 19	999-	9238	00		1:	9990	614
EΡ	1087						2004										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	PT,	ΙE,
					FΙ,												
	R 9912171 A 20010410 U 2001003472 A2 20020228															9990	
										HU 2	001-	3472			19990614		
	2001				_												
JP	2002	5183	94		Т		2002	0625			19990614						

JP	3497823			В2	20	040	216						
TW	542834			В	20	030	721	TW	1999-881	.09933		1	9990614
CN	1125070			С	20	031	022	CN	1999-807	7519		1	.9990614
NZ	508034			Α	20	031	128	NZ	1999-508	3034		1	.9990614
AT	270673			T	20	040	715	AT	1999-923	800		1	.9990614
PT	1087971			T	20	041	029	PT	1999-923	800		1	.9990614
ES	2223172			Т3	20	050	216	ES	1999-923	800		1	9990614
IN	1999DE00	876		Α	20	080	725	IN	1999-DE8	376		1	.9990615
EG	23758			Α	20	070	808	EG	1999-725)		1	.9990616
ZA	9904003			Α	20	0001	218	ZA	1999-400)3		1	.9990617
AP	1157			Α	20	080	630	AP	1999-158	3		1	.9990617
	W: BW,	GH,	GM,	KΕ,	MW, S	D,	UG,	ZM, Z					
US	6635762			В1	20	031	021	US	1999-335	030		1	.9990617
ИО	20000064	54		A	20	010	215	ИО	2000-645	54		2	20001218
ИО	318786			В1	20	050	509						
MX	2000PA12	853		Α	20	010	507	MX	2000-PA1	.2853		2	20001219
HR	20000008	86		A1	20	011	031	HR	2000-886)		2	20001219
	20000008	86		В1		080							
BG	105122			Α	20	011	031	BG	2001-105	122		2	20010108
BG	65063			В1	20	070	131						
HK	1036800			A1	20	040	227		2001-107				20011106
US	20040058	922		A1	20	040	325	US	2003-640	079		2	20030813
	20050002			Α	20	010	215		2005-201				20050113
PRIORITY	APPLN.	INFO	.:					US	1998-898		P		.9980619
								WO			W		.9990614
								US	1999-335	030	A.	1 1	.9990617

OTHER SOURCE(S): MARPAT 132:49976 GI

The title compds. [I; R1 = II (wherein the dashed line represents optional double bonds; m = 0-3; n = 0-3; X, B, D = O, S(O)d (d = 0-2), NR6, CR7R8; A, E = CR7R8; R6 = H, alkyl, CF3, etc.; R7, R8 = H, 2H, alkyl, etc.); R2, R3 = H, NH2, halo, etc.] which are inhibitors of protein tyrosine kinases such as Janus Kinase 3 (no data) and as such useful as immunosuppressive agents for organ transplants, lupus, multiple sclerosis, rheumatoid arthritis, psoriasis, Type I diabetes and complications from diabetes, cancer, asthma, atopic dermatitis, autoimmune thyroid disorders, ulcerative colitis, Crohn's disease, Alzheimer's disease, leukemia and other autoimmune diseases, were prepared E.g., a 2-step synthesis of I [R1 = piperidino; R2 = C1; R3 = H], starting with 4-chloro-7H-pyrrolo[2,3-d]pyrimidine, was given. Compds. I are effective at 0.1-1000 mg/day.

II 504-03-0, 2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pyrrolo[2,3-d]pyrimidines as inhibitors of protein tyrosine kinases such as Janus Kinase 3)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:640853 CAPLUS

DOCUMENT NUMBER: 131:271815

TITLE: Preparation of 2(1H)-quinolinones as serine protease

inhibitors for treatment of thrombotic disorders

INVENTOR(S): Dudley, Danette Andrea; Edmunds, Jeremy John

PATENT ASSIGNEE(S): Warner-Lambert Co., USA SOURCE: PCT Int. Appl., 136 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT						DATE			APF	LICA	MOITA	NO.		D	ATE	
WO	9950						1999	1007		WO	1998	 3-US2	 6709		1	9981	 215
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		IS,	JP,	KΡ,	KR,	LC,	LK,	LR,	LT,	LV	7, MC	G, MK	, MN,	MX,	NO,	NΖ,	PL,
		RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US	S, U2	Z, VN	, YU,	ΑM,	ΑZ,	BY,	KG,
		KΖ,	MD,	RU,	ΤJ,	TM											
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW	I, A	Γ, BE	, СН,	CY,	DE,	DK,	ES,
		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NI	, Pi	Γ, SE	, BF,	ВJ,	CF,	CG,	CI,
							MR,										
CA	2312	953			A1		1999	1007		CA	1998	3-231	2953		1	9981	215
AU	AU 9919184						1999	1018		AU	1999	9-191	84		1	9981	215
AU	AU 763110						2003	0710									
	BR 9815786																
EP	1091	955			A1		2001	0418		ΕP	1998	3-963	966		1	9981	215
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		ΙE,	SI,	LT,	LV,	FI,	RO										
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HU	2001	0014	84		А3		2003	0228									
JP	2002	5099	28		T		2002	0402		JΡ	2000)-541	167		1	9981	215
NZ	2001 2002 5059	21			A		2003	0829					921			9981	215
	9902						2000			ZA	1999	9-244	8		1	9990	330
MX	2000	PA06	107		A		2001	0219					107			0000	619
US	MX 2000PA06107 US 6855726				В1		2005	0215		US	2000	0-601	479		2	0000	803
NO	NO 2000004696				Α		2000	0920		NO	2000	0-469	6		2	0000	920
	RITY APPLN. INFO.:												90P			9980	331
										WO	1998	3-US2	6709		W 1	9981	215
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OTHER SOURCE(S): MARPAT 131:271815

GΙ

2(1H)-Quinolinones (I) [where A = CH2, CH, or C(alkyl); B and D = AB independently H, (un) substituted (cyclo) alkyl, hetero(cyclo) alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH2, or CH2N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un)substituted aryl or heterocycle; L = H, halogen, OH, (un)substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on serine proteases such as factor Xa, thrombin and/or factor VIIa, were prepared For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(2oxo-1,2,3,4-tetrahydro-3-quinolinyl)benzenecarbonitrile (5-step preparation given) to yield the N-substituted tetrahydroquinolinone. Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinolinone to form the piperidinylpentyl derivative This intermediate was converted to the title quinolinone II.2HCl by treatment with NH2OH.HCl followed by addition of CF3CO2H and reduction with Pd/C. Typically, the compds. of the invention showed 50% inhibition of factor Xa proteolytic activity on a synthetic substrate in concns. ranging from 50 μM to 1 nM. II demonstrated inhibitory activity in standard assays of thrombin (IC50 = $1.14 \mu M$), trypsin (IC50 = $0.562 \mu M$), and factor Xa (IC50 = $0.02 \mu M$). Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and cerebral infarction, restenosis, cancer, angina, diabetes, heart failure, and atrial fibrillation in mammals.

IT 766-17-6, cis-2,6-Dimethylpiperidine

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 2(1H)-quinolinones as serine protease inhibitors for treatment of thrombotic disorders)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

L44 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:640844 CAPLUS

DOCUMENT NUMBER: 131:271886

TITLE: Preparation of quinoxalinones as serine protease

inhibitors for treatment of thrombotic disorders

INVENTOR(S): Dudley, Danette Andrea; Edmunds, Jeremy John

PATENT ASSIGNEE(S): Warner-Lambert Co., USA SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GT

PA'	TENT 1	NO.			KIN	D	DATE			API	PLIC	ATI	ON I	NO.			DATE	
WO	9950	 254			A1	_	1999	1007		WO	199	 8-U	 S26	 704			 19981	215
																	, ID,	
		IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	L7	J, M	G, :	MK,	MN,	MX,	ИО	, NZ,	PL,
		RO,	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US	S, U	Ζ,	VN,	YU,	AM,	ΑZ	, BY,	KG,
		,	MD,	,	,													
	RW:																, DK,	
													SE,	BF,	ΒJ,	CF	, CG,	CI,
		CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TI), T	G						
CA	2319 2319	554			С		1999	1007		CA	199	8-2	319	554			19981	.215
	9919						1999										19981	
BR	9815	785			А		2000	1205		BR	199	8-1	578	5				
EP	1068																19981	_
	R:	•	•	•				•	GB,	GI	R, I	Ι,	LI,	LU,	ΝL,	SE	, MC,	PT,
		,	,	,	,	,	RO											
HU	2001	0014	70		A2		2001			HU	200	1 - 1	470				19981	.215
HU	2001	0014	70		А3		2002											
ZA	9902 6410	447			А		2000										19990	
US	6410	536			В1		2002							06			20000	
	2000						2001							42			20000	
	2000						2000			ИО	200	0 - 4	697				20000	
	2002						2002			US	200	2-3	800	6			20020	104
	6916				В2		2005	0712										
PRIORIT	Y APP	LN.	INFO	.:													19980	
													_				19981	_
										US	200	0-6	016	06		А3	20000	803
OTHER S	OURCE	(S):			MAR:	PAT	131:	27188	36									

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB 2(1H)-Quinoxalinones (I) [where A = N, N(alkyl)CH2, CH2N(alkyl), NO; B and D = independently H, (un)substituted (cyclo)alkyl, hetero(cyclo)alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH2, or CH2N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un)substituted aryl or heterocycle; L = H, halogen, OH, (un)substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on serine proteases such as factor Xa, thrombin, trypsin, and/or factor VIIa, were prepared For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(3-oxo-3,4-dihydro-2-quinoxalinyl)benzenecarbonitrile (6-step preparation given) to yield the N-substituted dihydroquinoxaline.

Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinoxalinone to form the piperidinylpentyl derivative This intermediate was debenzylated and the nitrile converted to the carboximidamide to form the title quinoxalinone (II).2HCl. Typically, the compds. of the invention showed 50% inhibition of factor Xa proteolytic activity on a synthetic substrate in concns. ranging from 50 μM to 1 nM. II demonstrated inhibitory activity in standard assays of thrombin (IC50 = $2.96 \mu M$), trypsin (IC50 = 2.03 μ M), and factor Xa (IC50 = 0.065 μ M). At a concentration of 100 μM, II inhibited the catalytic activity of human tissue factor/factor VIIa complex by 16%. In an in vitro assay, II demonstrated human prothrombinase (PTase) complex inhibition with an IC50 of $0.0015~\mu M$. The effects of II on thrombosis and hemostasis was studied in a rabbit veno-venous shunt model and in a dog electrolytic injury model of thrombosis. At the highest dose, II prolonged a PTT and PT by a 5- and 3.9-fold, resp., for the veno-venous shunt model and by 1.4- and 1.75-fold, resp., for the electrolytic injury model. Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and cerebral infarction, restenosis, cancer, angina, diabetes, heart failure, and atrial fibrillation in mammals.

IT 766-17-6, cis-2,6-Dimethylpiperidine

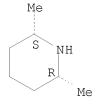
RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of 2(1H)-quinolinones as serine protease inhibitors for treatment of thrombotic disorders)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:511159 CAPLUS

DOCUMENT NUMBER: 131:157709

TITLE: Preparation of bicyclic pyridine and pyrimidine derivatives as neuropeptide Y receptor antagonists

INVENTOR(S): Norman, Mark H.; Chen, Ning; Han, Nianhe; Liu, Longbin; Hurt, Clarence R.; Fotsch, Christopher H.;

Jenkins, Tracy J.; Moreno, Ofir A.

PATENT ASSIGNEE(S): Amgen Inc., USA

SOURCE: PCT Int. Appl., 469 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
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WO	9940	091			A1		1999	0812		WO 1	999-1	US25	00		1	9990:	205
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,

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KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZW
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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     US 6187777
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     AU 747920
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                                20030121
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PRIORITY APPLN. INFO.:
                                             US 1998-73927P
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                                             US 1998-73981P
                                                                 Ρ
                                                                     19980206
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                                                                 Ρ
                                                                     19980720
                                                                 Ρ
                                             US 1998-93577P
                                                                     19980720
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                                                                 A 19990204
                                             WO 1999-US2500
                                                                 W
                                                                    19990205
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OTHER SOURCE(S): MARPAT 131:157709

Ι

AB Title compds.[I; R = H, CH3, (CH3)2CH, SCH3, CH3CH2, NH2, CF3, NHCOC6H5, cyclopropyl, CH2OH, (CH3)2CH2CH2, N(CH3)2, OCH3, NHCH3, NH(CH2)4NH2; R1 = NH, S, NCH3, O; R2 = H, COCH3, C6H5, CH3, CH3CH2; R3 = NH2, CH3, NHC6H5, N(CH2CH3)2, (CH3CH2)N(CH2)3CH3, (CH3)N(CH2)2NHCH3, N(CH3)CH(CH3)CH(Ph)OH, (CH3CH2)NCH2C(CH3):CH2, NHCH2CF3, NHCH2CH2C6H5, NH(CH2)3OCH2CH3, 4-C1C6H4, 4-CH3OC6H5, 2-thienyl, 1-pyrrolidinyl, 1-piperidinyl, 4-morpholinyl, 1-piperazinyl, 3-pyridyl; R4 = C6H5, 4-CH3C6H4, 4-ClC6H4, (CH3)3C, 4-FC6H4, 3-HOC6H4, 2-pyridyl, cyclohexyl, 2-furyl, 2-FC6H4 2-thienyl, 1-adamantyl, CH3, 4-CH3OC6H4; X = N, CH; etc.], pharmaceutical acceptable salts, ester, solvate, and N-oxide are prepared and tested as neuropeptide Y receptor antagonists in the modulation of feeding behavior, obesity, diabetes, cancer, inflammatory disorders, depression, stress related disorders, Alzheimer's disease and other disease conditions. Thus, the title compound I (R = CH3; R1 = NH; X = N; R2 = H; R3 = CH3) N(CH2CH3)2; R4 = C6H5) was prepared 766-17-6, cis-2,6-Dimethylpiperidine ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pyrrolopyridine and pyrrolopyrimidine derivs. as neuropeptide Y receptor antagonists)

RN 766-17-6 CAPLUS

CN Piperidine, 2,6-dimethyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

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Me
S NH
R
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REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 142/uses

1413 L42

7150149 USES/RL

L45 123 L42/USES

(L42 (L) USES/RL)

=> s L45 AND ((cancer OR "Cancer (genus)") or (angiogenesis OR "Angiogenesis"))

370638 CANCER

54465 CANCERS

384282 CANCER

(CANCER OR CANCERS)

370638 "CANCER"

54465 "CANCERS"

384282 "CANCER"

("CANCER" OR "CANCERS")

53989 "GENUS"

103 "GENUSES"

18740 "GENERA"

8 "GENERAS"

68072 "GENUS"

("GENUS" OR "GENUSES" OR "GENERA" OR "GENERAS")

48 "CANCER (GENUS)"

("CANCER"(W) "GENUS")

46826 ANGIOGENESIS

46826 "ANGIOGENESIS"

L46 5 L45 AND ((CANCER OR "CANCER (GENUS)") OR (ANGIOGENESIS OR "ANGIO GENESIS"))

=> d L45 1-5 ibib abs hitstr

L45 ANSWER 1 OF 123 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:890838 CAPLUS

TITLE: Preparation of male contraceptive compounds INVENTOR(S): Amobi, Nnaemeka Ikechukwu; Smith, Christopher

PATENT ASSIGNEE(S): King's College London, UK SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008087421	A2	20080724	WO 2008-GB163	20080117
W: AE, AG, AL,	AM. AO	. AT. AU. A7	7. BA. BB. BG. BH. BR.	BW. BY. B7.

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

GB 2007-893

A 20070117

AΒ Title compds. represented by the formula I [wherein R1-R4 = independently H or alkyl; R5 = (hetero)aryl, (hetero)cycloalkyl, aryloxy, etc.; X = C or N; m = 0-2; n = 0-2; Ar1, Ar2 = independently (un) substituted (hetero)aryl; with the proviso; and pharmaceutically acceptable salts or esters thereof] were prepared as. For example, amidation of N-methylpiperidine-2-carboxylic acid HCl with 3,3-diphenylpropylamine and followed by reduction with LiAlH4 gave II-2HCl. I were tested for contractile actions of L-type Ca2+-agonists in human vas deferens and effects of L-type Ca2+-antagonists, diphenylalkylamines and phenothiazines and functional evaluation of new compds. in human vas deferens prepns. Thus, I and their pharmaceutical compns. are useful for the reduction or prevention of the emission of sperm, or for the reduction or prevention of transmission of viral agents-transmitted in seminal fluid. ΙT 1041192-96-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of male contraceptive compds.)

RN 1041192-96-4 CAPLUS

CN Piperidine, 2-(3,3-diphenylpropyl)-6-methyl- (CA INDEX NAME)

L45 ANSWER 2 OF 123 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:590535 CAPLUS

DOCUMENT NUMBER: 148:534276

TITLE: Identification of bitter ligands activating human T2R

taste receptors using cells expressing genes for

individual receptor subtypes

INVENTOR(S): Li, Xiaodong; Xu, Hong; Li, Qing; Tang, Huixian;

Pronin, Alexey

PATENT ASSIGNEE(S): Senomyx, Inc., USA

SOURCE: PCT Int. Appl., 134pp., which

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

	PA]	CENT 1	NO.			KIN	D	DATE									Ι	ATE	
	 WO	2008	 0574	 70		A2	_	2008	0515					JS23:			2	0071	101
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BE	3,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DN	1,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
			GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU	J,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
																		MD,	
			MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG	3,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	Sk	ζ,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN	٧,	ZA,	ZM,	ZW				
	RW: AT, BE, E				BG,	CH,	CY,	CZ,	DE,	DK,	EE	Ξ,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
	IS, IT, L			LT,	LU,	LV,	MC,	MT,	NL,	PΙ	J,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G۷	V,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
			GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SI	J,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,
			BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM										
	US	2008	0187	936		A1		2008	0807		US	20	06-5	5556	17		2	0061	101
	US	2008	0038	739		A1		2008	0214		US	20	07-	7669	74		2	0070	622
	AU	2008	2009	99		A1		2008	0320		AU	20	008-2	2009	99		2	0800	303
PRIOR	ΙΤΊ	APP:	LN.	INFO	.:						US	20	06-5	5556	17		A 2	0061	101
											US	20	07-	7669	74		A 2	0070	622
											US	20	01-8	3258	82		A3 2	0010	405
											AU	20	02-3	3182	29		A3 2	0020	710
											US	20	02-1	1910.	58		A2 2	0020	710
											US	20	03-	7422	09		B2 2	0031	222
											US	20	07-	5556	17		A2 2	0070	326

AΒ Members of the human taste receptor family T2R that respond to bitter compds. are identified and methods of identifying ligands for these receptors using transgenic animal cells are described. Of the known members of the family, 23 were shown to be receptors for bitter ligands. Alleles of the gene for the T2R9 receptor that show very different responses in functional assays with for bitter ligands are identified. Activating ligands for these receptors may be used to modify flavors, either by adding them to foods or drugs, or by selectively removing them. These ligands may be used as therapeutics to treat and modulate T2R associated gastrointestinal and metabolic functions and gastrointestinal and metabolic diseases such as eating disorders, food sensing, food absorption, obesity, diabetes, Crohn's disease, and celiac disease. Receptors were screened for their responses to members of a library of compds. using animal cell hosts expressing the gene for an individual receptor. Patterns of response to library members were used to assign functions ("de-orphan") members of the receptor family.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(as ligand for bitter taste receptors; identification of bitter ligands activating human T2R taste receptors using cells expressing genes for individual receptor subtypes)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



L45 ANSWER 3 OF 123 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:493012 CAPLUS

DOCUMENT NUMBER: 148:509885

TITLE: Compositions and methods for treating neurological

disorders or damage

INVENTOR(S): Diamandis, Phedias; Tyers, Mike; Dirks, Peter B.

PATENT ASSIGNEE(S): Can.

SOURCE: Can. Pat. Appl., 3pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2606658	A1	20080413	CA 2007-2606658	20071012
PRIORITY APPLN. INFO.:			US 2006-851615P P	20061013

AB The invention relates to a clonogenic neurosphere assay to carry out high throughput screens (HTS) to identify potent and/or selective modulators of proliferation, differentiation and/or renewal of neural precursor cells, neural progenitor cells and/or self-renewing and multipotent neural stem cells (NSCs). The invention also relates to compns. comprising the identified modulators and methods of using the modulators and compns., in particular to treat neurol. disorders (e.g. brain or CNS cancer) or damage.

IT 205446-74-8, MDL 26630 trihydrochloride

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(screening for compns. and methods for treating neurol. disorders or damage with modulators of neural stem cells)

RN 205446-74-8 CAPLUS

CN 2,6-Piperidinediethanamine, hydrochloride (1:3) (CA INDEX NAME)

●3 HC1

L45 ANSWER 4 OF 123 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:372248 CAPLUS

DOCUMENT NUMBER: 148:497997

TITLE: Improving the Hydrophobicity and Oxidation Activity of

Ti-MWW by Reversible Structural Rearrangement

AUTHOR(S): Wang, Lingling; Liu, Yueming; Xie, Wei; Wu, Haihong;

Li, Xiaohong; He, Mingyuan; Wu, Peng

CORPORATE SOURCE: Shanghai Key Laboratory of Green Chemistry and

Chemical Processes, Department of Chemistry, East China Normal University, Shanghai, 200062, Peop. Rep.

China

SOURCE: Journal of Physical Chemistry C (2008), 112(15),

6132-6138

CODEN: JPCCCK; ISSN: 1932-7447

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

The postsynthesis treatment of Ti-MWW having the three-dimensional (3D) MWW structure with aqueous amine solns. has been carried out with the purpose to improve its hydrophobicity and catalytic activity in the liquid-phase oxidns. The treatment with piperidine (PI) or hexamethyleneimine (HMI) converted the 3D MWW structure into the corresponding lamellar precursor, which returned reversibly to the 3D MWW structure by further calcination. The treatments with other amines, however, caused a structural collapse or crystalline transfer to other phases. In the case of PI treatment, the structural conversion from 3D MWW to the MWW lamellar precursor occurred readily at 443 K at a PI/SiO2 molar ratio of >0.1 within 1 day for the Ti-MWW samples with various Si/Ti ratios. The structural interchange did not alter the amount as well as the coordination states of the Ti active sites, but removed the internal silanols by ca. 40%, leading to a defectless Ti-MWW catalyst with a more rigid and hydrophobic framework. This kind of structural rearrangement improved the catalytic activity by up to 20% in the ammoxidn. of ketones and also in the epoxidn. of a wide range of alkenes with various mol. dimensions.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: MOA (Modifier or additive use); USES (Uses)

(improving the hydrophobicity and oxidation activity of Ti-MWW by reversible structural rearrangement in presence of)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 5 OF 123 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:191632 CAPLUS

DOCUMENT NUMBER: 148:258933

TITLE: Identification of bitter ligands activating human T2R

taste receptors using cells expressing genes for

individual receptor subtypes

INVENTOR(S): Li, Xiaodong; Xu, Hong; Li, Qing; Tang, Huixian;

Pronin, Alexey

PATENT ASSIGNEE(S): Senomyx, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 82pp., Cont.-in-part of U.S.

Sr. No. 555,617. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

	PATENT	NO.			KIN		DATE			APP:	LICAT	ION I				ATE	
	US 2008 US 2002 US 7105	0094			A1 A1 B2		2008 2002 2006	0718		US US	2007-	7669 8258				0070 0010	
	US 2003	0170	608		A1		2003	0911			2002-					0020	710
	US 7338 US 2004	0209	313		B2 A1		2008 2004	1021		US .	2003-	7242	08		2	0031	201
	US 7399 US 2004	0248	149		B2 A1		2008 2004	1209		US .	2003-	7242	09		2	0031	201
	US 7393 US 2005	0069	944		B2 A1		2008 2005			US .	2004-	9868	71		2	0041	115
	US 7396 US 2007		759		B2 A1		2008 2007				2006-				2	0061	115
	US 2007				A1		2007				2006-					0061	
	US 2007				A1 A1		2007				2006					0061	
	US 2007 US 2007				A1		2007 2007				2006-! 2006-!					0061 0061	
	US 2007				A1		2007				2006 2006					0061	
	US 2007				A1		2007				2006 - I					0061	
	US 2007		-		A1		2007				2006-					0061	
	US 2007				A1		2007				2006-					0061	-
	WO 2008				A2		2008				2007-1				2	0071	101
	W:			AL,	AM,	ΑT,	AU,	AZ,	BA,	BB	, BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM	, DO,	DZ,	EC,	EE,	EG,	ES,	FI,
											, ID,						
											, LS,						
											, NI,						
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK	, SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN	, ZA,	ZM,	ZW				
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW	, ML,	MR,	ΝE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL	, SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
	AU 2008	2009	99		A1		2008	0320		AU .	2008-	2009	99		2	0800	303
PRIO	RITY APP	LN.	INFO	.:						US .	2001-	8258	82	,	A3 2	0010	405
											2002-				A2 2		
											2003-						
										US .	2007-	5556	17				
											2000-					0000	
											2000-						
											2001-					0010	
											2002-					0020	
											2002-				A3 2		
											2003-				A3 2		
											2006-					0061	
									2007-					0070			
AB	Members	of	the	huma.	n ta	ste	rece	ptor	fam	ily	T2R	that	res	pond	to !	bitt	er

AB Members of the human taste receptor family T2R that respond to bitter compds. are identified and methods of identifying ligands for these receptors using transgenic animal cells are described. Of the known members of the family, 23 were shown to be receptors for bitter ligands. Alleles of the gene for the T2R9 receptor that show very different responses in functional assays with for bitter ligands are identified. Activating ligands for these receptors may be used to modify flavors, either by adding them to foods or drugs, or by selectively removing them. These ligands may be used as therapeutics to treat and modulate T2R associated gastrointestinal and metabolic functions and gastrointestinal and metabolic diseases such as eating disorders, food sensing, food

absorption, obesity, diabetes, Crohn's disease, and celiac disease. Receptors were screened for their responses to members of a library of compds. using animal cell hosts expressing the gene for an individual receptor. Patterns of response to library members were used to assign functions ("de-orphan") members of the receptor family.

IT 504-03-0, 2,6-Dimethylpiperidine

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (as ligand for bitter taste receptors; identification of bitter ligands activating human T2R taste receptors using cells expressing genes for individual receptor subtypes)

RN 504-03-0 CAPLUS

CN Piperidine, 2,6-dimethyl- (CA INDEX NAME)



=> d L46 1-5 ibib abs hitstr

L46 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:493012 CAPLUS

DOCUMENT NUMBER: 148:509885

TITLE: Compositions and methods for treating neurological

disorders or damage

INVENTOR(S): Diamandis, Phedias; Tyers, Mike; Dirks, Peter B.

PATENT ASSIGNEE(S): Can.

SOURCE: Can. Pat. Appl., 3pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2606658	A1	20080413	CA 2007-2606658	20071012
PRIORITY APPLN INFO .			IIS 2006-851615P P	20061013

AB The invention relates to a clonogenic neurosphere assay to carry out high throughput screens (HTS) to identify potent and/or selective modulators of proliferation, differentiation and/or renewal of neural precursor cells, neural progenitor cells and/or self-renewing and multipotent neural stem cells (NSCs). The invention also relates to compns. comprising the identified modulators and methods of using the modulators and compns., in particular to treat neurol. disorders (e.g. brain or CNS cancer) or damage.

IT 205446-74-8, MDL 26630 trihydrochloride

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(screening for compns. and methods for treating neurol. disorders or damage with modulators of neural stem cells)

RN 205446-74-8 CAPLUS

CN 2,6-Piperidinediethanamine, hydrochloride (1:3) (CA INDEX NAME)

L46 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:288798 CAPLUS

DOCUMENT NUMBER: 147:419553

Solenopsin, the alkaloidal component of the fire ant TITLE:

(Solenopsis invicta), is a naturally occurring

inhibitor of phosphatidylinositol-3-kinase signaling

and angiogenesis

AUTHOR(S): Arbiser, Jack L.; Kau, Tweeny; Konar, Martha; Narra,

Krishna; Ramchandran, Ramani; Summers, Scott A.; Vlahos, Chris J.; Ye, Keqiang; Perry, Betsy N.;

Matter, William; Fischl, Anthony; Cook, James; Silver,

Pamela A.; Bain, Jenny; Cohen, Philip; Whitmire,

David; Furness, Scott; Govindarajan, Baskaran; Bowen,

J. Phillip

CORPORATE SOURCE: Department of Dermatology, Emory University School of

Medicine, Atlanta, GA, USA

Blood (2007), 109(2), 560-565 SOURCE:

CODEN: BLOOAW; ISSN: 0006-4971

PUBLISHER: American Society of Hematology

DOCUMENT TYPE: Journal LANGUAGE: English

AB Phosphatidylinositol-3-kinase (PI3K), and its downstream effector Akt, or protein kinase $B\alpha$ (PKB α), play a major regulatory role in control of apoptosis, proliferation, and angiogenesis. PI3K and Akt are amplified or overexpressed in a number of malignancies, including sarcomas, ovarian cancer, multiple myeloma, and melanoma. This pathway regulates production of the potent angiogenic factor vascular endothelial growth factor (VEGF), and protects tumor cells against both chemotherapy and reactive oxygen-induced apoptosis through phosphorylation of substrates such as apoptotic peptidase-activating factor-1 (APAF-1), forkhead proteins, and caspase 9. Given its diverse actions, compds. that suppress the PI3K/Akt pathway have potential pharmacol. utility as angiogenesis inhibitors and antineoplastic agents. Using the SVR angiogenesis assay, a screen of natural products, we isolated the alkaloid solenopsin, and found that it is a potent angiogenesis inhibitor. We also found that solenopsin inhibits the PI3K signaling pathway in cells upstream of PI3K, which may underlie its affects on angiogenesis. Consistent with inhibition of the activation of PI3K, solenopsin prevented the phosphorylation of Akt and the phosphorylation of its substrate forkhead box 01a (FOXO1a), a member of the forkhead family of transcription factors. Interestingly, solenopsin also inhibited Akt-1 activity in an ATP-competitive manner in vitro

without affecting 27 of 28 other protein kinases tested.

175478-17-8P 409060-79-3P 409060-81-7P ΤТ 409060-82-8P 409060-83-9P 409060-85-1P 409060-86-2P 409060-87-3P 409060-88-4P 409060-89-5P 409060-92-0P 409061-29-6P 409061-33-2P 409061-34-3P 571186-34-0P

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS
CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-81-7 CAPLUS
CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS
CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-83-9 CAPLUS
CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

● HCl

RN 409061-29-6 CAPLUS CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS
CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409061-34-3 CAPLUS

CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 571186-34-0 CAPLUS

CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

IT 28720-60-7P

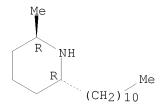
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solenopsin from fire ant is a naturally occurring inhibitor of PI3K signaling and angiogenesis)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel

angiogenesis inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
	2003 2003				A2 A3		2003 2003			 WO 2	003-	US21	05		2	0030	124
WO	∠003 ₩:	ΑE,	AG,		AM,	AT,	AU,	AZ,									
					ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
	LS, LT, L PL, PT, R HA HG H				•	•	•	•	•	•	•	•	•	•	,	•	•
	PL, PT, R UA, UG, U RW: GH, GM, K											UG,	ZM,	ZW,	AM,	AZ,	BY,
							TM, IE,										
IIS	FI, FR, G BJ, CF, C US 20050038071				CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	•	·
	RIORITY APPLN. INFO.:						2000	· · · · ·		US 2	002- 003-	3518	80P]	P 2		125
OTHER S	OURCE	(S):			MAR	PAT	139:	14980		WO Z	003-	USZI	0.5	١	N Z	0030.	124

OTHER SOURCE(S): MARPAT 139:149804

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}

AB The present invention relates to solenopsin A and its analogs, I [R1, R2 =

linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (\pm) -Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et2O followed by addition of ClCO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et20 and treatment with HCl(g). The anticancer activity of I·HCl [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth inhibition at 1, 3 and 6 μ g/mL). 32778-77-1DP, Solenopsin B, analogs 63950-17-4P, ΤТ (±)-Solenopsin A hydrochloride 175478-17-8P 409060-79-3P 409060-81-7P 409060-82-8P 409060-83-9P 409060-85-1P 409060-86-2P 409060-87-3P 409060-88-4P 409060-89-5P 409060-90-8P 409060-91-9P 409060-92-0P 409061-00-3P 409061-29-6P 409061-33-2P 409061-34-3P 571186-34-0P RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of solenopsin A, B and analogs as novel angiogenesis inhibitors) 32778-77-1 CAPLUS RN Piperidine, 2-methyl-6-tridecyl-, (2R,6R)- (CA INDEX NAME) CN

Absolute stereochemistry.

RN 63950-17-4 CAPLUS
CN Piperidine, 2-methyl-6-undecyl-, hydrochloride, (2R,6R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 175478-17-8 CAPLUS
CN Piperidine, 2-methyl-6-propyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-79-3 CAPLUS
CN Piperidine, 2-hexyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-81-7 CAPLUS CN Piperidine, 2-butyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-82-8 CAPLUS CN Piperidine, 2-heptyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409060-83-9 CAPLUS CN Piperidine, 2-methyl-6-(2-phenylethyl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-85-1 CAPLUS CN Piperidine, 2-ethyl-6-methyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409060-86-2 CAPLUS CN Piperidine, 2-(1-buten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry.
Double bond geometry unknown.

RN 409060-87-3 CAPLUS CN Piperidine, 2-methyl-6-(1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-88-4 CAPLUS
CN Piperidine, 2-methyl-6-(3-methyl-1-buten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409060-89-5 CAPLUS
CN Piperidine, 2-methyl-6-(4-methyl-1-penten-1-yl)-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry. Double bond geometry unknown.

RN 409060-90-8 CAPLUS CN 2-Piperidinepropanoic acid, 6-methyl-, ethyl ester, hydrochloride (1:1), (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

Relative stereochemistry. Double bond geometry unknown.

● HCl

RN 409060-92-0 CAPLUS CN Piperidine, 2-methyl-6-(1-propen-1-yl)-, hydrochloride (1:1), (2S,6R)-rel-(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 409061-00-3 CAPLUS
CN Piperidine, 2-methyl-6-pentyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-29-6 CAPLUS
CN Piperidine, 2-methyl-6-(3-methylbutyl)-, hydrochloride (1:1), (2S,6R)-rel(CA INDEX NAME)

Relative stereochemistry.

● HCl

RN 409061-33-2 CAPLUS CN Piperidine, 2-methyl-6-(4-methylpentyl)-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 409061-34-3 CAPLUS

CN Piperidine, 2-(1-hepten-1-yl)-6-methyl-, hydrochloride (1:1), (2R,6S)-rel-(CA INDEX NAME)

Relative stereochemistry.

Double bond geometry unknown.

● HCl

RN 571186-34-0 CAPLUS

CN Piperidine, 2-ethenyl-6-methyl-, hydrochloride (1:1), (2S,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

L46 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:816108 CAPLUS

DOCUMENT NUMBER: 130:66389

TITLE: Preparation of indole derivatives as gonadotropin

releasing hormone antagonists

INVENTOR(S): Goulet, Mark; Chu, Lin; Walsh, Thomas F.; Fisher,

Michael H.; Girotra, Narindar N.; Wyvratt, Matthew J.;

Lin, Peter; Ashton, Wallace T.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 59 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 5849764 A 19981215 US 1996-760817 19961205

PRIORITY APPLN. INFO.: US 1996-760817 19961205

OTHER SOURCE(S): MARPAT 130:66389

GΙ

The title compds. I [A = (halo)alkyl, (un)substituted cycloalkyl, alkenyl, AB or alkynyl, alkoxy, alkylthio, alkoxyalkyl, bond, etc.; R0 = H, (un) substituted alkyl, aryl, or aralkyl; R1 = various (un) substituted heterocycles; R2 = H, (un)substituted alkyl, aralkyl, aryl, etc.; R2 and A may form 5- to 7-atom ring; R3, R4, R5 = H, (un)substituted alkyl or alkenyl, cyano, nitro, halo; R6 = H, (un)substituted alkyl, aryl, cyano, NO2, halo, etc.; R7 = H, (un)substituted alkyl, or is absent; R8 = H, CO2H or derivs., NH2 or derivs., OH or SH or derivs., etc.; or R7 and R8 form a C3-7 carbocyclic ring; R9, R9', R10, R10' = H, (un)substituted alkyl, aryl, or aralkyl; X = H, halo, N, O, S(O)0-2, CO, CH2, etc.; M = 0-3] (claimed) and similar compds. were prepared as antagonists of gonadotropin releasing hormone (no data). The compds. are thus useful for treatment of a variety of conditions including hormone-dependent cancers, benign prostatic hypertrophy, endometriosis, irritable bowel syndrome, etc. For instance, amidation of 3-(1H-indol-5-yl)propionic acid with 2-[2-(3,4-dimethoxyphenyl)-1H-indol-3-yl]ethylamine using EDC and HOBT, and reduction of the amide product to a secondary amine using LiAlH4 in THF at

ΙI

77°, gave the invention compound II.

IT 192717-09-2P 192717-10-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole derivs. as gonadotropin releasing hormone antagonists)

RN 192717-09-2 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 192717-10-5 CAPLUS

CN 1H-Indole-5-acetamide, 2-(3,5-dimethylphenyl)-N,N-diethyl- α , α -dimethyl-3-[[6-[3-(3-pyridinyl)propyl]-2-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:511777 CAPLUS

DOCUMENT NUMBER: 127:121742

ORIGINAL REFERENCE NO.: 127:23485a, 23488a

TITLE: Preparation of heterocyclic compounds as antagonists

of gonadotropin releasing hormone

INVENTOR(S): Goulet, Mark; Ashton, Wallace T.; Chu, Lin; Fisher,

Michael H.; Girotra, Narindar N.; Lin, Peter; Wyvratt,

Matthew J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Goulet, Mark; Ashton, Wallace

T.; Chu, Lin; Fisher, Michael H.; Girotra, Narindar

N.; Lin, Peter; Wyvratt, Matthew J.

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA:	TENT	NO.			KINI)	DATE			APPL	ICAT	ION :	NO.		D	ATE		
WO	9721	704			A1		1997	0619		 WO 1	 996-	 US19	 444		1	 9961	210	
	W:	AL,	AM,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,	
							KZ,											
		NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	US,	UZ,	VN	
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							PT,											
					TD,		,	- ,	,	- ,	- '	,	- ,	- ,	- '	- '	,	
CA	2240	108	,	,	A1		1997	0619		CA 1	996-	2240	108		1	9961	210	
AU	9714																	
	7076						1999											
EP	8733	36								EP 1	996-	9442	49		1	9961	210	
	8733																	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	IE,	FΙ
CN	1208	412	·	·	A		1999	0217	•	CN 1	996-	1998	72		1	9961	210	
JP	1150	6471			Τ		1999	0608		JP 1	997-	5221	24		1	9961	210	
JP	3230	818			В2		2001	1119										
	2001									JP 2	000-	2577	91		1	9961	210	
HU	9903	671			A2		2001	1028		HU 1	999-	3671			1	9961	210	
HU	9903	671			АЗ		2001	1128										
AT	2150	81			Τ		2002	0415		AT 1	996-	9442	49		1	9961	210	
ES	2174	129			Т3		2002	1101		ES 1	996-	9442	49		1	9961	210	
ZA	9610	536			A		1997	0814		ZA 1	996-	1053	6		1	9961	213	
NO	9802	729			A		1998	0813		NO 1								
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										GB 1					A 1	9960	216	
										JP 1	997-	5221	24		A3 1	9961	210	
										WO 1	996-	US19	444		W 1	9961	210	
TIDD O	STIDOR	(0)			117 1	~ ~ m	107	1017	4.0									

OTHER SOURCE(S): MARPAT 127:121742

GI

$$R^{8}$$
 R^{7}
 R^{8}
 R^{2}
 R^{20}
 R^{10}
 R^{10

Me

AB The title compds. I [A = alkyl, etc.; R = H, alkyl, etc.; R1 = heterocyclic ring (generic structures given); R2 = H, alkyl, etc.; or R2A = ring; R3, R4, R5 = H, (un)substituted alkyl, alkenyl, etc.; or R3R4 = ring; R6 = H, (un)substituted alkyl, etc.; R7 = H, (un)substituted alkyl; unless X is hydrogen or halo, then R7 is absent; R8 = heterocyclic ring, etc.; or R7R8 = heterocyclic ring; R9, R19 = H, (un)substituted alkyl; further details on R9R19 and R9A are given; R20, R10 = H, (un)substituted alkyl, etc.; further details on R20R10, and R9R20, R9R2, R20R2, R20A are given; m = 0 to 3; X = N, etc.], useful as antagonists of gonadotropin releasing hormone (no data), are prepared I may be useful for the treatment of a variety of sex-hormone related and other conditions in both men and women. The title compound II was prepared in a multistep process.

II 192644-63-6P 192644-64-7P

ΙI

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as antagonists of gonadotropin releasing hormone)

RN 192644-63-6 CAPLUS

CN 1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3[[6-[3-(4-pyridinyl)propyl]-2-piperidinyl]methyl]-1H-indol-5-yl]-2-methyl(CA INDEX NAME)

192644-64-7 CAPLUS RN

1-Propanone, 1-(7-azabicyclo[2.2.1]hept-7-yl)-2-[2-(3,5-dimethylphenyl)-3-CN [[6-[3-(3-pyridiny1)propy1]-2-piperidiny1]methy1]-1H-indol-5-y1]-2-methy1-(CA INDEX NAME)

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NEWS
                  CAS REGISTRY enhanced with additional experimental
                  spectra
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         MAR 31
                  CA/CAplus and CASREACT patent number format for U.S.
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         APR 28
                 IMSRESEARCH reloaded with enhancements
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                  INPAFAMDB now available on STN for patent family
                  searching
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         MAY 30
                  DGENE, PCTGEN, and USGENE enhanced with new homology
                  sequence search option
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         JUN 06
                 KOREAPAT updated with 41,000 documents
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                  patent numbers for U.S. applications
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         JUN 19
                 CAS REGISTRY includes selected substances from
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                 STN on the Web enhanced with new STN AnaVist
                  Assistant and BLAST plug-in
         JUN 30
NEWS 21
                 STN AnaVist enhanced with database content from EPFULL
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                 CA/CAplus patent coverage enhanced
NEWS 23
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                 EPFULL enhanced with additional legal status
                  information from the epoline Register
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         JUL 28
                  IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
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NEWS 26
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         AUG 13
                 CA/CAplus enhanced with printed Chemical Abstracts
                  page images from 1967-1998
NEWS 28
         AUG 15
                 CAOLD to be discontinued on December 31, 2008
NEWS 29
         AUG 15
                 CAplus currency for Korean patents enhanced
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AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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=> s piperidine

L1 556824 PIPERIDINE

=> d 11

L1 ANSWER 1 OF 556824 REGISTRY COPYRIGHT 2008 ACS on STN

RN 1041285-64-6 REGISTRY

ED Entered STN: 15 Aug 2008

CN 2-Piperidinecarboxylic acid, 1-[[4-(dimethylamino)phenyl](4-ethylphenyl)methyl]- (CA INDEX NAME)

MF C23 H30 N2 O2

SR Other Sources

Database: ChemDB (University of California Irvine)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> d rsd

ANSWER 1 OF 556824 REGISTRY COPYRIGHT 2008 ACS on STN

Ring System Data

Elemental|Elemental| Size of |Ring System| Ring | RID Analysis |Sequence | the Rings | Formula | Identifier | Occurrence | RID | Count | SZ | RF EA | ES 16 1C6 IC6 146.150.18 | 2 C5N INC5 16 IC5N |46.156.1 |1

=> s 46.156.1/rid

1442478 46.156.1/RID L2

=> s 12

1442478 46.156.1/RID L3

L5

Uploading C:\Program Files\STNEXP\Queries\10502080 Broad4.str

STRUCTURE UPLOADED L4

=> s sub=13 and 14

MISSING TERM BEFORE 'AND'

Search expressions cannot begin with operators.

=> s sub=13 sam 14

SAMPLE SUBSET SEARCH INITIATED 14:53:53 FILE 'REGISTRY' SAMPLE SUBSET SCREEN SEARCH COMPLETED -4187 TO ITERATE

47.8% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET): ONLINE **COMPLETE** PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET): 79860 TO 87620 PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET): 10861 TO 13841

50 ANSWERS

50 SEA SUB=L3 SSS SAM L4

=> d scan

L5 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

Thieno[2,3-d]pyrimidine-3(4H)-acetamide, N-[4-[(2,6-dimethyl-1-piperidinyl)sulfonyl]phenyl]-4-oxo-

MF C21 H24 N4 O4 S2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L5 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN [1]Benzopyrano[4,3-c]pyrazole-3-carboxamide, 1-(2,4-dichlorophenyl)-N-(2,6-dimethyl-1-piperidinyl)-1,4-dihydro-7-methoxy-4,4-dimethyl-

MF C27 H30 C12 N4 O3

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L5 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Methanone, [6-(2-hydroxy-2-phenylethyl)-2-piperidinyl]phenyl-

MF C20 H23 N O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L5 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN 1H-Isoindole-1-carboxamide, N-[3-(2,6-dimethyl-1-piperidinyl)propyl]-2,3-

dihydro-2-[2-(4-methylphenyl)ethyl]-3-oxo-MF C28 H37 N3 O2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L5 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN Benzenecarbothioamide, 4-[(2,6-dimethyl-1-piperidinyl)sulfonyl]-

MF C14 H20 N2 O2 S2

$$\begin{array}{c|c} S \\ \parallel \\ H_2N-C \\ \hline \\ O \\ \hline \\ O \\ Me \\ \\ O \\ Me \\ \\ Me \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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LOGOFF? (Y)/N/HOLD:y

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NEWS	3	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS	4	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS	5	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS	6	FEB 10	COMPENDEX reloaded and enhanced
NEWS	7	FEB 11	WTEXTILES reloaded and enhanced
NEWS	8	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS	9	FEB 19	Increase the precision of your patent queries use terms from the IPC Thesaurus, Version 2009.01
NEWS	10	FEB 23	Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS	11	FEB 23	MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS	12	FEB 23	TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms
NEWS	13	FEB 23	Three million new patent records blast AEROSPACE into STN patent clusters

- NEWS 14 FEB 25 USGENE enhanced with patent family and legal status display data from INPADOCDB

 NEWS 15 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display formats

 NEWS 16 MAR 11 EPFILL backfile enhanced with additional full-text
- NEWS 16 MAR 11 EPFULL backfile enhanced with additional full-text applications and grants
- NEWS 17 MAR 11 ESBIOBASE reloaded and enhanced
- NEWS 18 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances
- NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China
- NEWS 20 MAR 30 IMSPATENTS reloaded and enhanced
- NEWS 21 APR 03 CAS coverage of exemplified prophetic substances enhanced
- NEWS 22 APR 07 STN is raising the limits on saved answers
- NEWS 23 APR 24 CA/Caplus now has more comprehensive patent assignee information
- NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
- NEWS 25 APR 28 CAS patent authority coverage expanded
- NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
- NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY
- NEWS 28 MAY 08 STN Express, Version 8.4, now available
- NEWS 29 MAY 11 STN on the Web enhanced
- NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy
- NEWS 31 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format
- NEWS 32 MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
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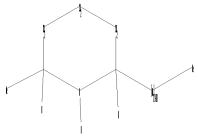
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chain nodes:
7 8 9 10 13 14

ring nodes:
1 2 3 4 5 6

chain bonds:
1-8 2-7 2-13 6-9 6-14 9-10

ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds:
1-2 1-6 2-3 3-4 4-5 5-6

exact bonds:
1-8 2-7 2-13 6-9 6-14 9-10

Match level:

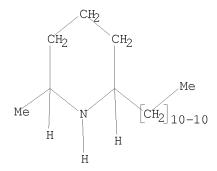
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L1 HAS NO ANSWERS

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100.0% PROCESSED 20092 ITERATIONS 15 ANSWERS SEARCH TIME: 00.00.01

L2 15 SEA SSS FUL L1

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FILE COVERS 1907 - 20 May 2009 VOL 150 ISS 21
FILE LAST UPDATED: 19 May 2009 (20090519/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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=> s L2

L3 104 L2

=> s L2/BIOL

104 L2

7806961 BIOL/RL

L4 28 L2/BIOL

(L2 (L) BIOL/RL)

=> d L4 1-28 ibib abs hitstr

L4 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1430102 CAPLUS

DOCUMENT NUMBER: 150:10964

TITLE: Method for treating oleoresin induced allergic

dermatitis by topical contacting with

anti-inflammatory biopolymers such as albumin

INVENTOR(S): Yarborough, Cody L.

PATENT ASSIGNEE(S): Boval Company, L.P., USA SOURCE: U.S. Pat. Appl. Publ., 6pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080292682	A1	20081127	US 2007-754052	20070525
PRIORITY APPLN. INFO.:			US 2007-754052	20070525
AD A mothed for tweet;	~~ ~1~	annain indua.	ad allamaia dammatitia	b + op : 0011.

AB A method for treating oleoresin induced allergic dermatitis by topically contacting an affected area with a therapeutically effective amount of one or more biopolymers for a sufficient amount of time to enable the one or more biopolymers to have an effect and removing the one or more biopolymers from the affected area. The oleoresin can be urushiol, isosolenopsin A, or a combination thereof. The one or more biopolymer can be albumin. The one or more biopolymers can provide a localized anti-inflammatory effect. Thus, Formulation for treating allergic dermatitis resulting from exposure to urushiol from poison ivy comprised (in wt%): water 88.6, bovine serum albumin 4.1, disodium ethylenediamine tetraacetate 0.1, Me paraben 0.2, hydroxypropylcellulose 1.0, polyethylene glycol 4.0, glycerin 2.0.

IT 35285-24-6, Isosolenopsin A

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)

RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L4 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:71279 CAPLUS DOCUMENT NUMBER: 148:152060 Composition comprising piperidine alkaloid for TITLE: treating neurological disorders and enhancing physical performance INVENTOR(S): Dorsey, Denis; Kindy, Mark S. PATENT ASSIGNEE(S): Synapsin Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 30pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _____ ____ _____ A2 20080117 A3 20081113 20070709 WO 2008008720 WO 2007-US73018 WO 2008008720 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA AU 2007272619 A1 20080117 AU 2007-272619 20070709 A2 20090219 AU 2007272619

AL, BA, HR, MK, RS
PRIORITY APPLN. INFO.:

US 2006-806887P P 20060710
WO 2007-US73018 W 20070709

20080117

20090408

OTHER SOURCE(S): MARPAT 148:152060

AB This invention relates to piperidine alkaloids found in fire ant venom (Solenopsis invicta) and uses thereof in neurol. disorders and phys. enhancement applications.

IT 28720-60-7, trans-2-Methyl-6-undecylpiperidine 35285-24-6

, cis-2-Methyl-6-undecylpiperidine 83709-88-0

A1

A2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and methods relating to solenopsins and their uses in treating neurol. disorders and enhancing phys. performance)

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR,

CA 2007-2657256 EP 2007-812708

20070709

20070709

RN 28720-60-7 CAPLUS

CA 2657256

EP 2043642

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 83709-88-0 CAPLUS

CN Piperidine, 2-methyl-6-undecyl- (CA INDEX NAME)

L4 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:288798 CAPLUS

DOCUMENT NUMBER: 147:419553

TITLE: Solenopsin, the alkaloidal component of the fire ant

(Solenopsis invicta), is a naturally occurring

inhibitor of phosphatidylinositol-3-kinase signaling

and angiogenesis

AUTHOR(S): Arbiser, Jack L.; Kau, Tweeny; Konar, Martha; Narra,

Krishna; Ramchandran, Ramani; Summers, Scott A.;
Vlahos, Chris J.; Ye, Keqiang; Perry, Betsy N.;

Matter, William; Fischl, Anthony; Cook, James; Silver,

Pamela A.; Bain, Jenny; Cohen, Philip; Whitmire,

David; Furness, Scott; Govindarajan, Baskaran; Bowen,

J. Phillip

CORPORATE SOURCE: Department of Dermatology, Emory University School of

Medicine, Atlanta, GA, USA

SOURCE: Blood (2007), 109(2), 560-565

CODEN: BLOOAW; ISSN: 0006-4971

PUBLISHER: American Society of Hematology

DOCUMENT TYPE: Journal LANGUAGE: English

AB Phosphatidylinositol-3-kinase (PI3K), and its downstream effector Akt, or protein kinase Bα (PKBα), play a major regulatory role in control of apoptosis, proliferation, and angiogenesis. PI3K and Akt are amplified or overexpressed in a number of malignancies, including sarcomas, ovarian cancer, multiple myeloma, and melanoma. This pathway regulates production of the potent angiogenic factor vascular endothelial growth factor (VEGF), and protects tumor cells against both chemotherapy and reactive oxygen-induced apoptosis through phosphorylation of substrates such as apoptotic peptidase-activating factor-1 (APAF-1), forkhead proteins, and caspase 9. Given its diverse actions, compds. that suppress the PI3K/Akt pathway have potential pharmacol. utility as angiogenesis inhibitors and antineoplastic agents. Using the SVR angiogenesis assay, a screen of natural products, we isolated the alkaloid solenopsin, and found that it is a potent angiogenesis inhibitor. We also found that solenopsin inhibits the PI3K signaling pathway in cells upstream of PI3K, which may

underlie its affects on angiogenesis. Consistent with inhibition of the activation of PI3K, solenopsin prevented the phosphorylation of Akt and the phosphorylation of its substrate forkhead box 01a (FOXO1a), a member of the forkhead family of transcription factors. Interestingly, solenopsin also inhibited Akt-1 activity in an ATP-competitive manner in vitro without affecting 27 of 28 other protein kinases tested.

IT 28720-60-7P

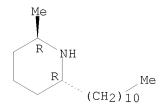
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solenopsin from fire ant is a naturally occurring inhibitor of PI3K signaling and angiogenesis)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:584143 CAPLUS

DOCUMENT NUMBER: 146:182892

TITLE: Alkaloids of anuran skin: antimicrobial function?
AUTHOR(S): Macfoy, Cyrus; Danosus, Douglas; Sandit, Raj; Jones,
Tappey H.; Garraffo, H. Martin; Spande, Thomas F.;

Daly, John W.

CORPORATE SOURCE: Biology Department, American University, Washington,

DC, USA

SOURCE: Zeitschrift fuer Naturforschung, C: Journal of

Biosciences (2005), 60(11/12), 932-937

CODEN: ZNCBDA; ISSN: 0939-5075

PUBLISHER: Verlag der Zeitschrift fuer Naturforschung

DOCUMENT TYPE: Journal LANGUAGE: English

AB A variety of alkaloids, most of which occur or are structurally related to alkaloids that occur in skin glands of dendrobatid poison frogs, were assayed for antimicrobial activity against the Gram-pos. bacterium Bacillus subtilis, the Gram-neg. bacterium Escherichia coli and the fungus Candida albicans. Certain pyrrolidines, piperidines and decahydroquinolines, perhydro-histrionicotoxin, and a synthetic pumiliotoxin were active against B. subtilis. Only 2-n-nonylpiperidine was active against E. coli. One pyrrolidine, two piperidines, two decahydroquinolines, and the synthetic pumiliotoxin were active against the fungus C. albicans. The results suggest that certain of the skin alkaloids of poison frogs, in addition to being noxious to predators, may also benefit the frog through protection against skin infections.

IT 83709-88-0

RL: BSU (Biological study, unclassified); BIOL (Biological study) (antimicrobial function of alkaloids of anuran skin)

RN 83709-88-0 CAPLUS

CN Piperidine, 2-methyl-6-undecyl- (CA INDEX NAME)

Me
$$\stackrel{\text{H}}{\underset{\text{N}}{\text{N}}}$$
 (CH₂)₁₀-Me

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:321395 CAPLUS

DOCUMENT NUMBER: 142:405849

TITLE: Cardiodepressant and neurologic actions of Solenopsis

invicta (imported fire ant) venom alkaloids

AUTHOR(S): Howell, George; Butler, Jordan; de Shazo, Richard D.;

Farley, Jerry M.; Liu, Hui-Ling; Nanayakkara, N. P.

D.; Yates, Anne; Yi, Gene B.; Rockhold, Robin W.

CORPORATE SOURCE: Department of Pharmacology and Toxicology, University

of Mississippi Medical Center, Jackson, MS, USA

SOURCE: Annals of Allergy, Asthma, & Immunology (2005), 94(3),

380-386

CODEN: ALAIF6; ISSN: 1081-1206

PUBLISHER: American College of Allergy, Asthma, & Immunology

DOCUMENT TYPE: Journal LANGUAGE: English

The authors hypothesized that the alkaloid compds. that are the majority components of fire ant (S. invicta) venom are capable of producing cardiovascular and central nervous system toxic effects in mammals. objective was to evaluate the toxic effects of synthetic S. invicta alkaloids in rodent models. Cardiovascular effects of i.v. injection of the racemic (\pm) -cis- and trans-isomers of 2-methyl-6-n-undecylpiperidine (isosolenopsin A and solenopsin A, resp.) were evaluated in anesthetized, gallamine-paralyzed rats who had received artificial ventilation and in isolated, perfused rat hearts. (±)-Solenopsin A dose dependently (3-30 mg/kg [10-104 μmol/kg]) depressed cardiovascular function. Maximal percent changes following injection of 30 mg/kg were $-42.96\% \pm 5.8\%$ for blood pressure, -29.13% \pm 3.6% for heart rate, and -43.5% \pm 9.2% for left ventricular contractility (dP/dt). (±)-Isosolenopsin A (3-15 mg/kg [10-52 µmol/kg]) produced responses similar to those seen with the corresponding doses of solenopsin A. In conscious, spontaneously breathing rats, solenopsin A (30 mg/kg i.v.) caused seizures, respiratory arrest, and death. Infusion of working, isolated, perfused hearts with solenopsin A reduced contractile function (dP/dt) at 10 μM and caused cardiac arrest at 100 μM . Thus, 2 alkaloid components of imported fire ant venom possess robust cardiorespiratory depressant activity and elicit seizures in the rat. Such effects identify these alkaloids as toxic compds. in biol. systems and may explain the cardiorespiratory failure noted in some individuals who experience massive fire ant stings.

IT 28720-60-7, (±)-Solenopsin A 63950-16-3,

(±)-Isosolenopsin A

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)

(cardiodepressant and neurol. actions of Solenopsis invicta venom alkaloids)

RN 28720-60-7 CAPLUS

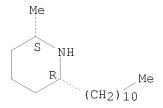
CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 63950-16-3 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:590960 CAPLUS

DOCUMENT NUMBER: 139:149804

TITLE: Solenopsin A, B and analogs as novel angiogenesis

inhibitors

INVENTOR(S): Bowen, Phillip J.; Arbiser, Jack L.; Whitmore, David;

Furness, Scott M.

PATENT ASSIGNEE(S): The University of Georgia Research Foundation, Inc.,

USA; Emory University

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE				APPLICATION NO.						DATE			
				A2 20030731				WO 2003-US2105						20030124					
WO	2003	0615	98		А3		2003	1204											
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OTHER SOURCE(S): MARPAT 139:149804

GΙ

AΒ The present invention relates to solenopsin A and its analogs, I [R1, R2 = linear, cyclic or branched (un)saturated (un)substituted C1-20-alkyl] and II, or a pharmaceutically acceptable salt, for use as angiogenesis inhibitors. The present compds. unexpectedly exhibit good activity as angiogenesis inhibitors, which find use as antitumor/anticancer agents as well as to treat a number of conditions or disease states in which angiogenesis is a factor. Thus, (\pm) -Solenopsin A hydrochloride (\pm) -I·HCl [R1 = Me, R2 = undecyl] was prepared from 4-chloropyridine hydrochloride via reaction with undecylmagnesium bromide in Et20 followed by addition of C1CO2Ph; transesterification with KOCMe3; lithiation with BuLi followed by methylatio with MeI; hydrogenation/hydrogenolysis with H2 over Pd/C in MeOH; stereoselective reduction with NaBH3CN in CH2Cl2; and deprotection with CF3CO2H in CH2Cl2 followed by dissoln. in Et2O and treatment with HCl(g). The anticancer activity of I·HCl [R1 = Me, R2 = (CH2)10Me, CH:CHCO2Et, CH2CH2CO2Et, CH:CH(CH2)4Me, CH:CHCH2CHMe2, (CH2)3CHMe2, (CH2)2CHMe2, CH:CHCCHMe2, CH:CHPr-n, CH:CHEt, CH:CHMe, (CH2)2Ph, (CH2)6Me, Bu, cyclopentyl, CH2Bu] was determined (comparative chart: % cell growth

inhibition at 1, 3 and 6 μ g/mL). IT 63950-17-4P, (±)-Solenopsin A hydrochloride RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of solenopsin A, B and analogs as novel angiogenesis inhibitors)

RN 63950-17-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

● HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:281716 CAPLUS

DOCUMENT NUMBER: 139:241528

TITLE: Fire Ant Venom Alkaloid, Isosolenopsin A, a Potent and

Selective Inhibitor of Neuronal Nitric Oxide Synthase AUTHOR(S): Yi, G. B.; McClendon, D.; Desaiah, D.; Goddard, J.;

Lister, A.; Moffitt, J.; Vander Meer, R. K.; Deshazo,

R.; Lee, K. S.; Rockhold, R. W.

CORPORATE SOURCE: University of Mississippi Medical Center, Jackson, MS,

39216-4505, USA

SOURCE: International Journal of Toxicology (2003), 22(2),

81-86

CODEN: IJTOFN; ISSN: 1091-5818

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Massive, multiple fire ant, Solenopsis invicta, stings are often treated aggressively, particularly in the elderly, despite limited evidence of systemic toxicity due to the venom. Over 95% of the S. invicta venom is composed of piperidine alkaloid components, whose toxicity, if any, is unknown. To assess a possible pharmacol. basis for systemic toxicity, an alkaloid-rich, protein-free methanol extract of the venom from whole ants was assayed for inhibitory activity on the following nitric oxide synthase (NOS) isoforms, rat cerebellar neuronal (nNOS), bovine recombinant endothelial (eNOS), and murine recombinant immunol. (iNOS). Cytosolic NOS activity was determined by measuring the conversion of [3H]arginine to [3H]citrulline in vitro. Rat nNOS activity was inhibited significantly and in a concentration-dependent manner by the alkaloid-rich venom extract For nNOS, enzyme activity was inhibited by approx. 50% with 0.33 μq of this venom extract, and over 95% inhibition of the three isoforms, nNOS, eNOS, and iNOS, was found with doses of 60 μg in 60- μl reaction mixture These results indicate that the alkaloid components of S. invicta venom can produce potent inhibition of all three major NOS isoforms. Isosolenopsin A (cis-2-methyl-6-undecylpiperidine), a naturally occurring fire ant piperidine alkaloid, was synthesized and tested for inhibitory activity against the three NOS isoforms. Enzyme activities for nNOS and eNOS were over 95% inhibited with 1000 μM of isosolenopsin A, whereas the activity of iNOS was inhibited by only about 20% at the same concentration IC50 for each of three NOS isoforms was approx. 18 μ M for nNOS, 156 μM for eNOS, and >1000 μM for iNOS, resp. Kinetic studies showed isosolenopsin A inhibition to be noncompetitive with L-arginine (Ki = 19 The potency of isosolenopsin A as an inhibitor of nNOS compares favorably with the inhibitory potency of widely used nNOS inhibitors. Inhibition of NOS isoforms by isosolenopsin A and structurally similar compds. may have toxicol. significance with respect to adverse reactions to fire ant stings.

IT 35285-24-6P, Isosolenopsin A

RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

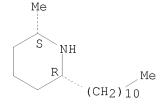
(isosolenopsin A is a potent and selective inhibitor of neuronal nitric oxide synthase)

RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

43

Absolute stereochemistry. Rotation (-).



RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:271982 CAPLUS

DOCUMENT NUMBER: 136:294967

TITLE: Preparation of solenopsin derivatives and analogues as

fire ant suppressants

INVENTOR(S): Bowen, J. Phillip; Furness, M. Scott; Whitmire, David

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 24 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6369078	B1	20020409	US 2000-650257	20000829
PRIORITY APPLN. INFO.:			US 1999-151724P P	19990831

OTHER SOURCE(S): MARPAT 136:294967

GΙ

$$R^{1}$$
 R^{2}
 R^{2}

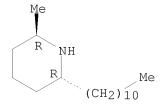
- AB Solenopsin alkaloid derivs., such as I or II [R1 = C1 to C20 (un)saturated, linear, cyclic or branch-chained (un)substituted alkyl; (un)substituted aromatic, ester], and salts thereof, were prepared for their use as inhibitors of the biosynthesis of the venom of fire ants and/or insecticides. Thus, solenopsin hydrochloride II [R1 = Me, R2 = (CH2)10Me].HCl was prepared via a multistep synthetic sequence starting from 1-bromoundecane, 4-chloropyridine hydrochloride and iodomethane.
- IT 63950-17-4P, (±)-Solenopsin A hydrochloride
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
 (Synthetic preparation); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

(preparation of solenopsin derivs. and analogs as fire ant suppressants)

RN 63950-17-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, hydrochloride (1:1), (2R,6R)-rel- (CA INDEX NAME)

Relative stereochemistry.



● HCl

THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 18 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:32567 CAPLUS

DOCUMENT NUMBER: 136:229621

TITLE: Behavioral and chemical analysis of venom gland secretion of queens of the ant Solenopsis geminata

Cruz-Lopez, Leopoldo; Rojas, Julio C.; De La AUTHOR(S):

Cruz-Cordero, Ricardo; Morgan, E. David

CORPORATE SOURCE:

El Colegio de la Frontera Sur, Tapachula, Mex.

Journal of Chemical Ecology (2001), 27(12), 2437-2445 SOURCE:

CODEN: JCECD8; ISSN: 0098-0331

PUBLISHER: Kluwer Academic/Plenum Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

Bioassays in a Y-tube olfactometer showed that workers of Solenopsis geminata (Hymenoptera: Formicidae) were attracted to venom gland exts. of queens. Gas chromatog. coupled mass spectrometry anal. of individual glands of queens of S. geminata showed that the secretion is composed mainly of a large amount of 2-alkyl-6-methylpiperidine alkaloids and a tiny amount of a δ -lactone and a α -pyrone, which have been earlier identified as components of the queen attractant pheromone of Solenopsis invicta Buren. However, addnl. small amts. of a mixture of sesquiterpenes and pentadecene were found. The possible function of the sesquiterpenoid compds. is discussed.

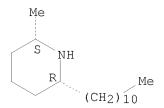
35285-24-6, cis-2-Methyl-6-undecylpiperidine ΙT RL: BSU (Biological study, unclassified); BIOL (Biological study)

(behavioral and chemical anal. of venom gland secretion of queens of ant)

RN 35285-24-6 CAPLUS

Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:723698 CAPLUS

DOCUMENT NUMBER: 126:57550
ORIGINAL REFERENCE NO.: 126:11267a

TITLE: Defensive alkaloids from ants AUTHOR(S): Braekman, J. C.; Daloze, D.

CORPORATE SOURCE: Lab. Bio-Organic Chem., Univ. Brussels, Brussels,

B1050, Belg.

SOURCE: Journal of the Brazilian Chemical Society (1996),

7(4), 251-256

CODEN: JOCSET; ISSN: 0103-5053 Sociedade Brasileira de Quimica

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

PUBLISHER:

AB A review with 25 refs. The constituents of the poison gland in ants have been the subject of many investigations, and it has been demonstrated that they are usually proteinaceous. However, in some group of ants, these venom proteins have been superceded by cyclic alkaloids acting as defensive substances. Two groups of ant alkaloids, namely the solenopsins and the tetraponerines, are presented. The solenopsins are a group of 2,6-dialkylpiperidines produced by "fire ants" (Solenopsis spp), which are significant pests in many parts of the southern United States. The tetraponerines are diaminated tricyclic alkaloids isolated from the venom of the new Guinean ant, Tetraponera sp. The elucidation of the biosynthetic pathways of both groups of alkaloids is discussed.

IT 137038-57-4, trans-Solenopsin A 137038-58-5,

cis-Solenopsin A

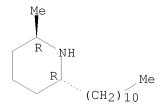
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(defensive alkaloids from ants)

RN 137038-57-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)- (CA INDEX NAME)

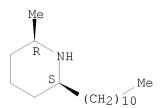
Absolute stereochemistry. Rotation (-).



RN 137038-58-5 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:337437 CAPLUS

DOCUMENT NUMBER: 125:82295

ORIGINAL REFERENCE NO.: 125:15475a,15478a

TITLE: Biosynthesis of the solenopsins, venom alkaloids of

the fire ants

AUTHOR(S): Leclercq, S.; Braekman, J. C.; Daloze, D.; Pasteels,

J. M.; Van der Meer, R. K.

CORPORATE SOURCE: Lab. - Bio Organic Chem., Fac. Sci., Univ. Brussels,

Brussels, B-1050, Belg.

SOURCE: Naturwissenschaften (1996), 83(5), 222-225

CODEN: NATWAY; ISSN: 0028-1042

PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Feeding expts. and anal. of solenopsin A degradation products were used to confirm the polyacetate origin of cis- and trans-solenopsin A in fire

ants.

IT 137038-57-4, trans-Solenopsin A 137038-58-5,

cis-Solenopsin A

RL: BSU (Biological study, unclassified); MFM (Metabolic formation);

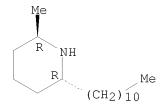
BIOL (Biological study); FORM (Formation, nonpreparative)

(biosynthesis of the solenopsins, venom alkaloids of the fire ants)

RN 137038-57-4 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)- (CA INDEX NAME)

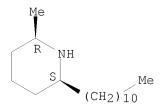
Absolute stereochemistry. Rotation (-).



RN 137038-58-5 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L4 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:207238 CAPLUS

DOCUMENT NUMBER: 118:207238

ORIGINAL REFERENCE NO.: 118:35525a,35528a

TITLE: A new dialkylpiperidine in the venom of the fire ant

Solenopsis invicta

AUTHOR(S): Blum, Murray S.; Fales, Henry M.; Leadbetter, Graham;

Leonhardt, Barbara A.; Duffield, Richard M.

CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Atlanta, GA, 30602, USA

SOURCE: Journal of Natural Toxins (1992), 1(2), 57-63

CODEN: JNTOER; ISSN: 1058-8108

DOCUMENT TYPE: Journal LANGUAGE: English

AB Addnl. alkaloids have been identified in the venom of workers of the fire ant S. invicta. trans-2-Methyl-6-((Z)-8-heptadecenyl)piperidine is the third unsatd. analog detected as a poison gland product. trans-2-Methyl-6-heptadecylpiperidine accompanies the unsatd. nitrogen heterocycle. The structures of both compds. were established by unambiguous synthesis. These alkaloids are present in the venoms of all Solenopsis populations analyzed.

IT 83709-88-0

RL: BIOL (Biological study)
 (in venom, of ant)

RN 83709-88-0 CAPLUS

CN Piperidine, 2-methyl-6-undecyl- (CA INDEX NAME)

$$\text{Me} \quad \text{H} \quad \text{(CH2)} \, \text{10} - \text{Me}$$

L4 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:136057 CAPLUS

DOCUMENT NUMBER: 114:136057

ORIGINAL REFERENCE NO.: 114:22917a,22920a

TITLE: Method and composition using solenopsine A or

solenopsines A and B or Solenopsis invicta whole body extract for treating parasitic infestation in animals

INVENTOR(S): Rehmert, Chalmer V., Jr.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 10 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

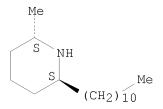
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				APPLICATION NO.					DATE				
WO	WO 9007274				A1 19900712			WO 1990-US78				19900103							
	W:	ΑT,	ΑU,	BB,	BG,	BR,	CH,	DE,	DK,	FI	, GB,	HU,	JP,	KP,	KR,	LK,	LU,		
		MC,	MG,	MW,	NL,	NO,	RO,	SD,	SE,	SU	, US								
	RW:	ΑT,	BE,	BF,	ВJ,	CF,	CG,	CH,	CM,	DE	, DK,	ES,	FR,	GΑ,	GB,	ΙΤ,	LU,		
		$\mathrm{ML}_{m{\prime}}$	MR,	NL,	SE,	SN,	TD,	ΤG											
US	4910	209			А		1990	0320	1	US	1989-:	2933	65		1	9890	104		
US	5075	320			А		1991	1224	1	US	1989-	4299	77		1	9891	101		
AU	9049	519			А		1990	0801	Ž	AU	1990-	4951	9		1	9900	103		
US	5098	914			А		1992	0324	1	US	1991-	6561	88		1	9910	307		
PRIORITY	APP	LN.	INFO	.:					1	US	1989-:	2933	65	i	A2 1	9890	104		
									1	US	1989-	4299	77	i	A2 1	9891	101		
									Ţ	WO	1990-1	JS78		i	A 1	9900	103		

AB A method and composition for treatment of parasitic infestation in animals, including humans, comprises oral administration over several days of solenopsine A or solenopsine A and B, or a whole body extract of the imported red fire ant, S. invicta. Administration of solenopsine A in an oral dosage form or the whole body extract over 1-11 days with regular booster dosages disseminates the composition through the blood and tissue fluids of the treated animals, resulting in the elimination of blood- and tissue fluid-feeding parasites. Thus, treatment of infested animals with solenopsine A in an oral dosage form resulted in nearly 100% elimination of blood- and tissue fluid-feeding parasites. More units of solenopsine A were required for effective treatment than when S. invicta whole body extract

Absolute stereochemistry. Rotation (+).



RN 35285-25-7 CAPLUS CN Piperidine, 2-methyl-6-undecyl-, (2S,6S)- (CA INDEX NAME)

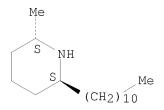
Absolute stereochemistry. Rotation (+).

RN 132903-10-7 CAPLUS
CN Piperidine, 2-methyl-6-tridecyl-, (2R-trans)-, mixt. with (2S-trans)-2-methyl-6-undecylpiperidine (9CI) (CA INDEX NAME)

CM 1

CRN 35285-25-7 CMF C17 H35 N

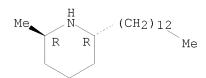
Absolute stereochemistry. Rotation (+).



CM 2

CRN 32778-77-1 CMF C19 H39 N

Absolute stereochemistry.



L4 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:465222 CAPLUS

DOCUMENT NUMBER: 113:65222

ORIGINAL REFERENCE NO.: 113:10907a,10910a

TITLE: Solenopsis invicta venom piperidine alkaloids for

treating parasitic infestation of animals

INVENTOR(S): Rehmert, Chalmer V., Jr.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 3 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT	NO.	KIN	ND DATE	Ξ	APPLI	CATION		DATE				
US 4910	209	 A	 199(00320	US 19		19890104					
US 5075	320	A	1991	11224	US 19	89-4299	77		19891101			
CA 2006	952	A1	l 1990	0704	CA 19		19891229					
WO 9007	274	A1	l 1990	0712	WO 19	19900103						
W:	AT, AU,	BB, BG,	BR, CH,	DE,	DK, FI,	GB, HU,	JP,	KΡ,	KR,	LK,	LU,	
	MC, MG,	MW, NL,	NO, RO,	SD,	SE, SU,	US						
RW:	AT, BE,	BF, BJ,	CF, CG,	CH,	CM, DE,	DK, ES,	FR,	GΑ,	GB,	ΙΤ,	LU,	
	ML, MR,	NL, SE,	SN, TD,	TG								
AU 9049	A	1990	0801	AU 19	90-4951	9		1:	9900	103		
PRIORITY APP	LN. INFC).:			US 19	89-2933	65	i	A2 1	9890	104	
					US 19	89-4299	77	i	A 19	9891	101	
					WO 19	90-US78		i	A 19	9900	103	

AB Parasitic infestation of animals is treated by oral administration of a piperidine alkaloid composition containing solenopsins A and B. The alkaloids are

obtained from the venom of Solenopsis invicta but whole body exts. can be used in capsules.

IT 35285-25-7, Solenopsin A

RL: BIOL (Biological study)

(of Solenopsis invicta venom, as parasiticide for animals)

RN 35285-25-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1988:129740 CAPLUS

DOCUMENT NUMBER: 108:129740

ORIGINAL REFERENCE NO.: 108:21260h,21261a

TITLE: Crossed immunoelectrophoretic studies of whole body

extracts and venom from the imported fire ant

Solenopsis invicta

AUTHOR(S): Butcher, Brian T.; Reed, Margaret A.

CORPORATE SOURCE: Med. Cent., Tulane Univ., New Orleans, LA, 70112, USA SOURCE: Journal of Allergy and Clinical Immunology (1988),

81(1), 33-40

CODEN: JACIBY; ISSN: 0091-6749

DOCUMENT TYPE: Journal LANGUAGE: English

Although allergic reactions occur after imported fire ant (IFA) sting, currently, only IFA whole body extract (IFAWBE) is available for diagnosis and immunotherapy of IFA-sensitive individuals. Here are reported crossed immunoelectrophoretic studies comparing antigenicity and allergenicity of S. invicta IFAWBE and IFA venom (IFAV). Rabbits were hyperimmunized with IFAWBE prepared from S. invicta or with IFAV obtained from S. invicta by an elec. shock method. Crossed immunoelectrophoresis with anti-IFAWBE detected at least 29 precipitin lines in IFAWBE and 3 lines in IFAV, but none in a synthetic venom, transpiperidine. Anti-IFAV detected 6 precipitin lines in IFAV and 5 lines in IFAWBE, but no lines were detected with transpiperidine. Cross-line immunoelectrophoresis confirmed the IFAV origin of at least 3 of the peaks in IFAWBE. Crossed radioimmunoelectrophoresis with 11 IFAWBE RAST-pos. sera elicited radiostaining with 5 antigens in IFAWBE that were probably IFAV associated One of these allergens was recognized by all sera; the other allergens were recognized by 8, 7, 5, and 4, resp., of the 11 sera. Four of the antigens present in IFAV prepns. had allergenicity. These findings indicate that IFA allergens probably originate in IFAV, but that transpiperidine, a major constituent of IFAV, does not appear to be immunogenic. IFAV may be a more appropriate reagent than IFAWBE for laboratory testing and for clin. diagnosis and immunotherapy of IFA-sensitive individuals.

IT 35285-25-7

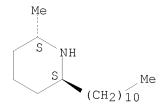
RL: BIOL (Biological study)

(allergens of fire ant comparison with)

RN 35285-25-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L4 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:591173 CAPLUS

DOCUMENT NUMBER: 103:191173

ORIGINAL REFERENCE NO.: 103:30669a,30672a

TITLE: Poison gland products of Solenopsis and Monomorium

species

AUTHOR(S): Blum, M. S.; Jones, T. H.; Lloyd, H. A.; Fales, H. M.;

Snelling, R. R.; Lubin, Y.; Torres, J.

CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, 30602, USA SOURCE: Journal of Entomological Science (1985), 20(2), 254-7

CODEN: JESCEP; ISSN: 0749-8004

DOCUMENT TYPE: Journal LANGUAGE: English

2-Alkyl-6-methylpiperidines have been identified in the venoms of workers of 5 species of ants in the genus Solenopsis. S. globularia pacifica Produces cis- [52084-39-6] and trans-2-nonyl-6-methylpiperidine [52084-40-9], whereas S. steinheili and Solenopsis (Diplorhoptrum) species PR synthesize N-methyl-2-nonyl-6-methylpiperidine [33444-22-3] as well. Workers of S. geminata rufa produce cis- [92619-72-2] and trans-2-undecyl-6-methylpiperidine [76094-26-3] as do workers of S. maniosa. Phenol [108-95-2] and salicylaldehyde [90-02-8] were identified in exts. of workers of Monomorium destructor in contrast to 2,5-dialkylpyrrolidines that are considered characteristic natural

products of this genus. IT 28720-60-7 63950-16-3

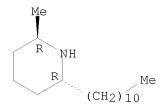
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of ant venom)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

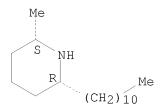
Relative stereochemistry.



RN 63950-16-3 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6S)-rel- (CA INDEX NAME)

Relative stereochemistry.



L4 ANSWER 17 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:3421 CAPLUS

DOCUMENT NUMBER: 102:3421
ORIGINAL REFERENCE NO.: 102:643a,646a

TITLE: (5Z,9Z)-3-Alkyl-5-methylindolizidines from Solenopsis

(Diplorhoptrum) species

AUTHOR(S): Jones, Tappey H.; Highet, Robert J.; Blum, Murray S.;

Fales, Henry M.

CORPORATE SOURCE: Dep. Chem., United States Nav. Acad., Annapolis, MD,

21402, USA

SOURCE: Journal of Chemical Ecology (1984), 10(8), 1233-49

CODEN: JCECD8; ISSN: 0098-0331

Journal DOCUMENT TYPE: English LANGUAGE:

The alkaloidal venom components of 2 species of thief ants, Solenopsis species AA and S. conjurata contained (52,92)-3-hexyl-5-methylindolizidine and a mixture of (5Z,9Z)-3-ethyl-5-methylindolizidine and cis-2-methyl-6-nonylpiperidine, trans-2-methyl-6-nonylpiperidne, cis-2-methyl-6-undecylpiperidine, and hexadecanoic acid. Monomorium pharaonis was similarly investigated and found to contain the indolizidine and pyrrolidines previously described. Both indolizidines were synthesized along with their stereoisomers and separated by preparative gas chromatog. Spectral studies revealed the stereochem. to be 52,92 in both cases. The stereochem. of 2-butyl-5-pentylpyrrolidine in M. phaeraonis was established. Biosynthetic relations are discussed.

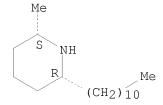
ΙT 63950-16-3

> RL: BIOL (Biological study) (of venom, of thief ant)

63950-16-3 CAPLUS RN

Piperidine, 2-methyl-6-undecyl-, (2R,6S)-rel- (CA INDEX NAME) CN

Relative stereochemistry.



ANSWER 18 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

1984:169498 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 100:169498

ORIGINAL REFERENCE NO.: 100:25696h,25697a

TITLE: Actions of synthetic piperidine derivatives on an insect acetylcholine receptor/ion channel complex AUTHOR(S): David, J. A.; Crowley, P. J.; Hall, S. G.; Battersby,

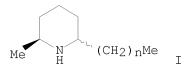
M.; Sattelle, D. B.

CORPORATE SOURCE: Dep. Zool., Univ. Cambridge, Cambridge, CB2 3EJ, UK SOURCE: Journal of Insect Physiology (1984), 30(3), 191-6

CODEN: JIPHAF; ISSN: 0022-1910

DOCUMENT TYPE: Journal LANGUAGE: English

GT



AΒ The actions of synthetic piperidines (I, n = 10 or 12) on the response to ionophoretically-applied acetylcholine (ACh) [51-84-3] were tested on the cell body membrane of the fast coxal depressor motoneuron of the cockroach Periplaneta americana. The cis form and the cis (80%):trans (20%) mixture of 2-methyl-6-undecyl piperidine were the most effective (the half-maximal

blocking action of the mixed isomers was estimated to be 6.3 + 10-5M). Less potent was the cis (50%):trans (50%) mixture of 2-methyl-6-tridecylpiperidine. However, pure cis-2-methyl-6-tridecylpiperidine [35285-26-8] was even less effective than the mixed isomers, indicating that, in the case of the tridecyl derivative, the trans form was largely responsible for the block of the ACh response. cis-2-Methyl-6-undecylpiperidine [35285-24-6] failed to inhibit the binding of N-[propionyl-3H] propionylated α -bungarotoxin to metathoracic ganglion homogenates at 1.0 + 10-4M. Also, block of ACh-induced current by 2-methyl-6-undecylpiperidine (cis 80%:trans 20%) was largely independent of membrane potential in the range -120 to -60 mV, indicating an interaction with the closed ACh receptor/ion channel complex at a site which, in the case of the cis isomer, is sep. from the binding site for α -bungarotoxin.

IT 35285-24-6 83709-88-0

RL: BIOL (Biological study)

(acetylcholine receptor-ion channel complex of cockroach central nervous system response to)

RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 83709-88-0 CAPLUS

CN Piperidine, 2-methyl-6-undecyl- (CA INDEX NAME)

$$\text{Me} \quad \overset{\text{H}}{\underset{\text{N}}{\text{N}}} \text{ (CH2)}_{\text{10}} - \text{Me}$$

L4 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1983:48322 CAPLUS

DOCUMENT NUMBER: 98:48322

ORIGINAL REFERENCE NO.: 98:7379a,7382a

TITLE: Mechanism of action of fire ant (Solenopsis) venoms.

I. Lytic release of histamine from mast cells

AUTHOR(S): Lind, Nancy K.

CORPORATE SOURCE: John A. Burns Sch. Med., Univ. Hawaii, Honolulu, HI,

96822, USA

SOURCE: Toxicon (1982), 20(5), 831-40 CODEN: TOXIA6; ISSN: 0041-0101

DOCUMENT TYPE: Journal

LANGUAGE: Codinar

GΙ

AB The mechanism of histamine (I) [51-45-6] release from rat mast cells by whole venom from S. geminata and S. invicta or by 2-methyl-6-undecylpiperidine-HCl (C11) [84293-44-7] was investigated. I release was stimulated by ≥ 1 of these agents (1) occurred in normal and metabolically inactivated cells, (2) had a biphasic time course in normal and inactivated cells, (3) was temperature-dependent and did not occur

0°, (4) was accompanied by concomitant cytoplasmic enzyme release, (5) was accomplished by substantial cell swelling, and (6) was correlated with a loss of cell refractility in phase-contrast microscopy. Thus, C11 causes initial permeability changes in the plasma membrane followed by lytic release of I and other cell components. The nonspecific nature of this action of the dialkylpiperidine component of the venoms provides the fire ants with a defense of general applicability.

IT 84293-44-7

at

RL: BIOL (Biological study)

(histamine release from mast cells by, mechanism of, fire ant venom in relation to)

RN 84293-44-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, hydrochloride (1:1) (CA INDEX NAME)

Me
$$\stackrel{\text{H}}{\text{N}}$$
 (CH₂)₁₀ - Me

● HCl

L4 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1982:613027 CAPLUS

DOCUMENT NUMBER: 97:213027

ORIGINAL REFERENCE NO.: 97:35717a,35720a

TITLE: Ant venom alkaloids from Solenopsis and Monomorium

species. Recent developments

AUTHOR(S): Jones, Tappey H.; Blum, Murray S.; Fales, Henry M. CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, 30602, USA

SOURCE: Tetrahedron (1982), 38(13), 1949-58

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB 2-(4-Penten-1-yl)-1-piperideine (I), and a number of known 2,6-dialkylpiperidines were isolated from venoms of Solenopsis species and their structures determined by independent preparation of I and by gas chromatog.-mass spectroscopy. Five known 2,5-dialkylpyrrolidines were also isolated from the venom of M. latinode. The chemical and biol. of the venom alkaloids from Solenopsis and Monomorium were briefly reviewed.

IT 83709-88-0

RL: BIOL (Biological study)

(from Solenopsis pergandei venom)

RN 83709-88-0 CAPLUS

CN Piperidine, 2-methyl-6-undecyl- (CA INDEX NAME)

Me
$$\stackrel{\text{H}}{\stackrel{\text{N}}{\longrightarrow}}$$
 (CH₂)₁₀-Me

L4 ANSWER 21 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:524253 CAPLUS

DOCUMENT NUMBER: 89:124253

ORIGINAL REFERENCE NO.: 89:19167a,19170a

TITLE: Histamine release by fire ant (Solenopsis) venom
AUTHOR(S): Read, George W.; Lind, Nancy K.; Oda, Charlotte S.
CORPORATE SOURCE: Pharmacol. Dep., Univ. Hawaii Sch. Med., Honolulu, HI,

USA

SOURCE: Toxicon (1978), 16(4), 361-7

CODEN: TOXIA6; ISSN: 0041-0101

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

AB Venoms from the fire ants S. invicta and S. geminata were free of detectable histamine but caused histamine (I) [51-45-6] release from rat peritoneal mast cells in vitro. On a per ant basis, venom from S. invicta (ED50 = 0.12 venom reservoirs/mL) was 4 times as potent as venom from S. geminata (ED50 = 0.54 venom reservoirs/mL). Hexane exts. of venom and a synthetic piperidine were as effective as the venom itself in producing I release, indicating that the piperidines in the venom are responsible for most of the activity. Intradermal injection of venom from S. geminata into human subjects produced dose-dependent wheals and subjective responses (itch and/or pain). Ten nanograms of I produced effects approx. equivalent to the venom of a single ant and the antihistamine diphenhydramine significantly reduced the wheal and subjective responses to the venom. Apparently, I release plays a major role in the action of fire ant venoms.

IT 35285-24-6

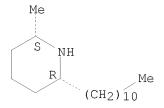
RL: BIOL (Biological study)

(histamine release by, fire ant venom in relation to)

RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L4 ANSWER 22 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1976:176921 CAPLUS

DOCUMENT NUMBER: 84:176921

ORIGINAL REFERENCE NO.: 84:28695a,28698a

TITLE: Fire ant venoms: chemotaxonomic correlations with

alkaloidal compositions

AUTHOR(S): MacConnell, J. G.; Blum, M. S.; Buren, W. F.;

Williams, R. N.; Fales, H. M.

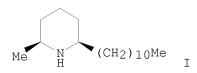
CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, USA

SOURCE: Toxicon (1976), 14(1), 69-78

CODEN: TOXIA6; ISSN: 0041-0101

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ



The alkaloidal composition of venom of workers from 29 populations of .apprx.13 New World fire ant (Solenopsis) species was determined by gas-liquid chromatog. and was found to be quite uniform for species from widely separated areas. However, in some cases closely related species cannot be reliably distinguished by venom composition At least some species possessing an anomalous morphol. also produce venoms of anomalous composition All venoms are dominated by 2,6-dialkylpiperidines, e.g. cis-2-methyl-6-(n-undecyl)piperidine(I), although long-chain alkanes were detected in the venom of species of Solenopsis. Some characteristics and biosynthetic implications are discussed.

IT 28720-60-7 35285-24-6

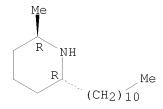
RL: BIOL (Biological study)

(of Solenopsis venom, chemotaxonomy in relation to)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

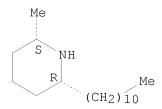
Relative stereochemistry.



RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L4 ANSWER 23 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1973:489732 CAPLUS

DOCUMENT NUMBER: 79:89732

ORIGINAL REFERENCE NO.: 79:14559a,14562a

TITLE: Fire ant venoms. Intraspecific and interspecific

variation among castes and individuals

AUTHOR(S): Brand, J. M.; Blum, M. S.; Barlin, M. R.

CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, USA

SOURCE: Toxicon (1973), 11(4), 325-31 CODEN: TOXIA6; ISSN: 0041-0101

DOCUMENT TYPE: Journal LANGUAGE: English

AB The ratio of cis- to trans-2-methyl-6-n-undecylpiperidine in the venom of workers and soldiers of Solenopsis geminata and in alate queens of S. geminata, S. xyloni, S. invicta, and S. richteri showed considerable variation between individuals of a particular caste within a species.

IT 28720-60-7 35285-24-6

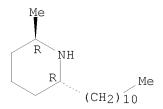
RL: BIOL (Biological study)

(of fire ant venom, caste in relation to)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

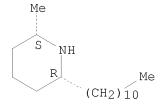
Relative stereochemistry.



RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



ANSWER 24 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1973:402936 CAPLUS

DOCUMENT NUMBER: 79:2936 ORIGINAL REFERENCE NO.: 79:534h,535a

TITLE: Chemistry of the venom of Solenopsis aurea

Blum, M. S.; Brand, J. M.; Duffield, R. M.; Snelling, AUTHOR(S):

R. R.

Dep. Entomol., Univ. Georgia, Athens, GA, USA CORPORATE SOURCE:

SOURCE: Annals of the Entomological Society of America (1973),

66(3), 702

CODEN: AESAAI; ISSN: 0013-8746

DOCUMENT TYPE: Journal LANGUAGE: English

AB Venom of S. aurea consisted almost exclusively of

cis-2-methyl-6-n-undecylpiperidine (I) and

trans-2-methyl-6-n-undecylpiperidine (II), along with a trace of

 $\operatorname{cis-2-methyl-6-n-tridecylpiperidine}.$ Although the venoms of S. aurea and S. geminata were both dominated by I and II, in the former the average I:II

ratio was 4:1, whereas in the latter it was .apprx.1.5:1.

ΙT 28720-60-7 35285-24-6

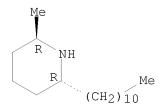
RL: BIOL (Biological study)

(of venoms, of fire ant)

28720-60-7 CAPLUS RN

Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME) CN

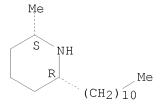
Relative stereochemistry.



RN 35285-24-6 CAPLUS

Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).



ACCESSION NUMBER: 1973:145442 CAPLUS

DOCUMENT NUMBER: 78:145442

ORIGINAL REFERENCE NO.: 78:23371a,23374a

TITLE: Biochemical evolution in fire ant venoms AUTHOR(S): Brand, J. M.; Blum, M. S.; Ross, H. H.

CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, USA

SOURCE: Insect Biochemistry (1973), 3(9), 45-51

CODEN: ISBCAN; ISSN: 0020-1790

DOCUMENT TYPE: Journal LANGUAGE: English

AB The distribution of 2,6-dialkyl(and alkenyl-)piperidine alkaloids in the venom of fire ant workers of Solenopsis xyloni, S. geminata, S. richteri, and S. invicta was compared with that in the venom of alata queens of the same species. Whereas the venoms of workers of S. invicta and S. richteri contain piperidines with C13 or C15 side chains, the queens of these species produce venoms in which these compds. are essentially lacking. A comparison of the ratio of cis-2-methyl-6-n-undecylpiperidine to trans-2-methyl-6-n-undecylpiperidine in all of these venoms, together with qual. differences of other alkaloidal components, particularly in workers of S. richteri and S. invicta, suggested that the venoms of S. xyloni and S. geminata are similar to the ancestral type, whereas those of S. richteri and S. invicta are more highly evolved.

IT 28720-60-7 35285-24-6

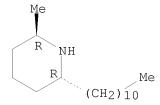
RL: BIOL (Biological study)

(of venoms of ants, caste and evolution in relation to)

RN 28720-60-7 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME)

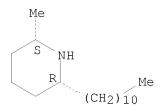
Relative stereochemistry.



RN 35285-24-6 CAPLUS

CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L4 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1973:92973 CAPLUS

DOCUMENT NUMBER: 78:92973

ORIGINAL REFERENCE NO.: 78:14851a,14854a

TITLE: Antibacterial activity of venom alkaloids from the

imported fire ant, Solenopsis invicta

AUTHOR(S): Jouvenaz, D. P.; Blum, M. S.; MacConnell, J. G. CORPORATE SOURCE: Insects Affecting Man Animals Res. Lab., Agric. Res.

Serv., Gainesville, FL, USA

SOURCE: Antimicrobial Agents and Chemotherapy (1972), 2(4),

291 - 3

CODEN: AMACCQ; ISSN: 0066-4804

DOCUMENT TYPE: Journal English LANGUAGE:

AB The fire ant venom alkaloids trans-2-methyl-6-undecylpiperidine (I) [35285-25-7], trans-2-methyl-6-tridecylpiperidine [32778-77-1], and trans-2-methyl-6-pentadecylpiperidine [32778-79-3] were more inhibitory toward Gram-pos. bacteria than toward Gram-neq. bacteria. A 4th alkaloid, trans-2-methyl-6-(cis-6-pentadecenyl)piperidine [32778-78-2], available only in minute quantities, was ineffective against all organisms.

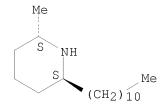
ΙT 35285-25-7

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (bactericidal activity of, from fire ant venom)

35285-25-7 CAPLUS RN

Piperidine, 2-methyl-6-undecyl-, (2S,6S)- (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (+).



ANSWER 27 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN L4

1972:444074 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 77:44074 ORIGINAL REFERENCE NO.: 77:7287a,7290a

TITLE: Fire ant venoms. Comparative analyses of alkaloidal

components

AUTHOR(S): Brand, J. M.; Blum, M. S.; Fales, H. M.; MacConnell,

CORPORATE SOURCE: Dep. Entomol., Univ. Georgia, Athens, GA, USA

SOURCE: Toxicon (1972), 10(3), 259-71CODEN: TOXIA6; ISSN: 0041-0101

DOCUMENT TYPE: Journal LANGUAGE: English

The venom alkaloids of Solenopsis geminata, S. xyloni, and the red and AB black forms of S. saevissima were studied. The venoms contain various 2,6-disubstituted piperidines. Gas chromatog. and mass spectra were used

to identify: cis-2-methyl-6-undecylpiperidine (I) [35285-24-6],

trans-2-methyl-6-undecylpiperidine (II) [35285-25-7], cis-2-methyl-6-tridecylpiperidine (III) [35285-26-8], trans-2-methyl-6-tridecylpiperidine (IV) [32778-77-1], cis-2-methyl-6-pentadecylpiperidine (V) [35285-28-0],

trans-2-methyl-6-pentadecylpiperidine (VI) [32778-79-3],

cis-2-methyl-6-(cis-4-tridecen-1-yl)piperidine (VII) [35285-30-4], trans-2-methyl-6-(cis-4-tridecen-1-yl) piperidine (VIII) [32778-76-0], cis-2-methyl-6-(cis-6-pentadecen-1-yl) piperidine (IX) [35285-32-6], and trans-2-methyl-6-(cis-6-pentadecen-1-yl) piperidine (X) [32778-78-2]. The venom of the red S. saevissima contained all 10 compds. plus another that was not identified, with the trans forms predominating and the cis forms present as traces. X was present in the largest amount, with lower but

about equal amts. of IV and VIII. The venom of the black form of S. saevissima had mainly I, II, III, IV, VII, and VIII; only traces of IX and X were found, and the amount of VIII was much greater than the amount of IV. The black form is obviously not just a color variation. Venoms of S. xyloni and S. geminata contain I, II, III, and VII, and I and II are the major components. III and VII are present only in traces, and none of the C15 side-chain compds. were found. The venom of S. xyloni contained a compound not found in the other venoms; degradation and mass spectra showed it to be 2-methyl-6-undecyl- Δ 1,2-piperideine [35285-61-1]. It may be a precursor or intermediate in the metabolism of the other components. The possible correlation of venom alkaloid composition with the environmental success of the imported S. saevissima species was discussed. Although the lack of protein was thought to make these stinging ants unique, recent studies showed a small amount of polypeptide material in the venom of the red form of S. saevissima.

ΤT 35285-24-6 35285-25-7

> RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of fire ant venoms)

35285-24-6 CAPLUS RN

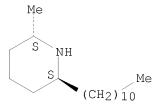
CN Piperidine, 2-methyl-6-undecyl-, (2S,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

35285-25-7 CAPLUS RN

Piperidine, 2-methyl-6-undecyl-, (2S,6S)- (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (+).



ANSWER 28 OF 28 CAPLUS COPYRIGHT 2009 ACS on STN

1970:442643 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 73:42643 ORIGINAL REFERENCE NO.: 73:7033a,7036a

TITLE: Alkaloid from fire ant venom: identification and

synthesis

AUTHOR(S): MacConnell, John G.; Blum, Murray S.; Fales, Henry M. CORPORATE SOURCE: Dep. of Entomol., Univ. of Georgia, Athens, GA, USA SOURCE:

Science (Washington, DC, United States) (1970),

168(3933), 840-1

CODEN: SCIEAS; ISSN: 0036-8075

DOCUMENT TYPE: Journal LANGUAGE: English

An alkaloid, trans-2-methyl-6-n-undecylpiperidine (solenopsin A), was isolated from the venom of the fire ant Solenopsis saevissima. The structure was confirmed by an unambiguous synthesis.

28720-60-7 ΙT

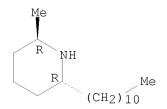
RN

RL: BIOL (Biological study) (from venoms of ants)

28720-60-7 CAPLUS

Piperidine, 2-methyl-6-undecyl-, (2R,6R)-rel- (CA INDEX NAME) CN

Relative stereochemistry.



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